MEST User Guide 2011-11-23

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We would like to acknowledge the work of the staff at eMII - IMOS, for allowing us to edit their MEST User Guide to create this IMAS specific MEST User Guide.

1. GENERAL OVERVIEW – *Getting Started*

1.1. Using this Guide

1.1.1. Audience

The Metadata Entry and Search Tool (MEST) User Guide provides a comprehensive guide to understanding and using the MEST.

It is not a technical guide to the MEST, nor does it discuss MEST-related software, rather, it provides guidance for users to browse, search, analyse and download MEST holdings of metadata, data and related materials. Information about creation of a metadata record, attaching files and related materials and maintenance functions is also discussed.

The intended audience for the MEST User Guide are those with an interest in Marine Science, including academics, scholars, students, as well as industry and management within the Marine Science community and research space.

1.1.2. Navigation and Icons

In addition to the navigation available via the contents pages, throughout the user guide references to other sections of the document will contain links to assist navigation between relevant sections (on the reference select ‘CTRL + Click’ to follow the link).

Throughout the guide information will be presented that supplements the current discussion. The information will be presented within a grey box.

The following icons will provide an indication of the content of the sub-text boxes.

	Frequently Asked Questions
	Important Information
	Hints and Tips
	Warnings/Known Issues/Future Developments

It is possible to navigate directly to the Frequently Asked Questions via the contents page.

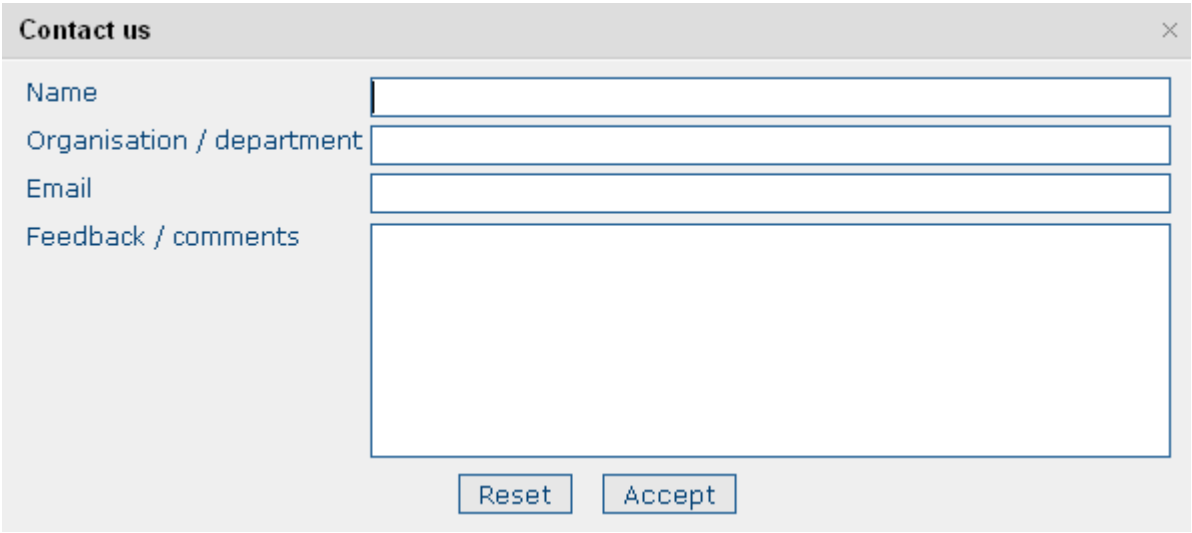
1.1.3. Feedback

Feedback and comments are welcome regarding the User Guide. The guide is a living document to be amended with future software releases and implementation of enhancements.

If you would like to submit feedback please select the **Contact us** link, and in the **Contact us** form fill out the following fields:

- **Name**
- **Organisation / department**
- **Email**
- **Feedback / comments**

Follow this by selecting the **Accept** button. Example form shown below.



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1.2. Metadata Entry and Search Tool (MEST)

Welcome to the Metadata Entry and Search Tool (MEST), a tool which aids in the discovery and distribution of data. The MEST allows browsing, uploading, downloading and online analysis of data.

The descriptive information gathered by this tool is based on ISO19115 and its subset the Marine Community Profile (MCP of ISO 19115), for the development and accurate description of geo-spatial metadata records.

The MEST offers a range of functions including:

- A searchable catalogue of metadata records describing both geospatial and non-geospatial data and other resources,
- Capacity to search for, edit and publish metadata records (conforming to several metadata standards) on the local MEST catalogue,
- Capacity to place permissions on records, to allow controlled public release,
- Data files and related ancillary information (including documents) can be directly uploaded, downloaded from metadata records,
- Capacity to search for records on remote catalogues,
- Links within local metadata records that will display mapped data,
- A web mapping tool which allows viewing of mapped data from a range of remote servers.

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1.3. Supported Browsers

The Metadata Entry and Search Tool (MEST) is optimised to operate with the latest stable versions of Internet Explorer and Mozilla Firefox. At the time of writing (February 2010) the latest stable version of Internet Explorer is v7, and for Mozilla Firefox it is v3.5.7

Browsers such as IE 5 and older, and Firefox 1 and older are not compatible with the MEST. More recent versions of Internet Explorer (6+) and Mozilla Firefox (2+) may or may not have full functionality, and shall remain unsupported. Alternative browsers are to be used with this website at your own risk.

1.3.1. Printing

Read your browser's help guide for information on printing.

Internet Explorer:

1. From the menu, select **Help** > **Contents and Index**.

2. Type in the field: ‘printing webpages, changing how a webpage looks’ and select the **Display** button.

Mozilla Firefox:
http://support.mozilla.com/en-US/kb/Printing+a+web+page?s=printing

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1.4. Metadata and the Data Standard

Metadata is commonly known as ‘data about data’, it is the information pertaining to the entire dataset, describing the name, format, context, content, structure and control of, or over, data. It may also provide information related to the purpose, quality, and location of the data as well as information related to its creation.

Australian Ocean Data Centre, Marine Community Profile of ISO 19115 - The Marine Community Profile has been developed in accordance with the rules established by the international standard under the authority of the Australian Ocean Data Centre Joint Facility (AODCJF). The Marine Community Profile is a subset of the international standard and includes all ISO 19115 core metadata elements. In addition, the Marine Community Profile has defined supplementary elements, codelists and vocabularies to assist in the description of marine resources.

The metadata profile provides information related to the identification, maintenance and constraints, spatial and temporal extent, spatial representation and reference, quality and distribution of a data set.

In this guide the Marine Community Profile of ISO 19115, **By Group** will be described (see section **4.3.3 By Group**) as it is the suggested method for the creation and viewing of metadata records.

What is metadata used for?

The use of metadata includes, providing:

- An adequate description of a dataset, so that someone other than the owner of the data can interpret it, and decide if the dataset may be useful,
- A way for the data to be found using a search tool.

A useful example of metadata would be a library catalogue record. A catalogue record provides information about an article or book, where it is located and its current status. It also contains keywords, title, author and other fields to enable finding the relevant material through a search engine.

What are the benefits to the researcher for submitting their data?

The IMAS infrastructure using the MEST, will provide secure, long-term data archiving facilities, a platform for collaboratively using and sharing datasets and data-manipulation processes.

Submitting your data will:

- Encourage communication and collaboration among researchers.
- Advertise your research.
- Secure your data over the long term.
- Allow you to satisfy requirements associated with the funding of the research, such as data archival and sharing.

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1.5. Data Access

It is not necessary to apply for a user name and password to search publically available metadata records and public data, however, a user name and password ***is*** required to create metadata records or download and view restricted data. Registration is free and will allow you to download data that has been made available only to registered users.

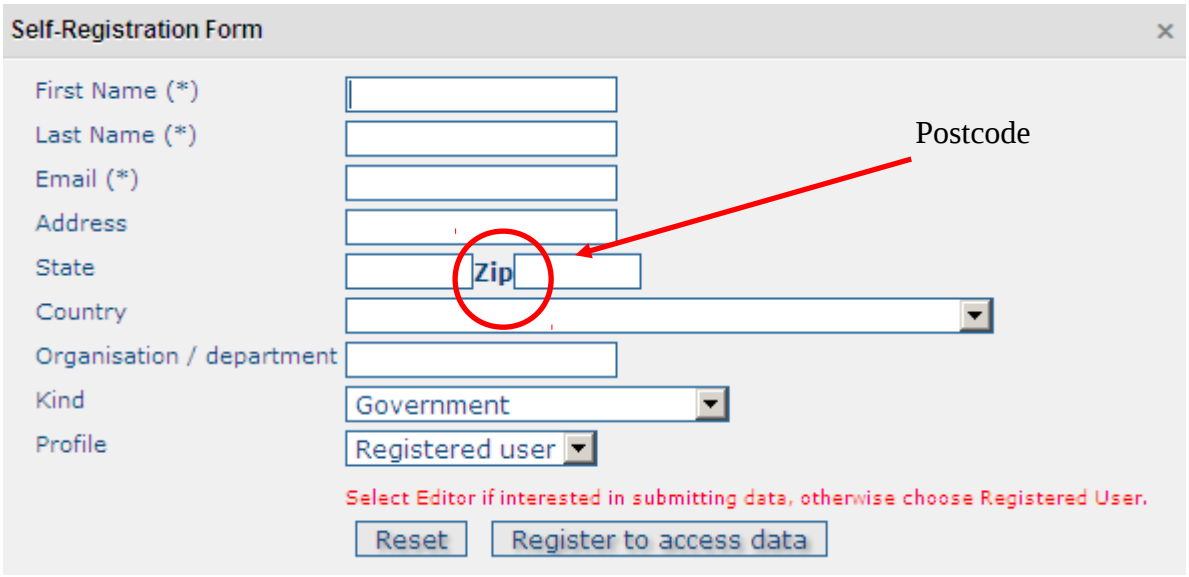
To indicate if data is available for the resource,

- **Public records with public data** will have a **Data for Download** button visible within the search output or listed in the record in the **Distribution** element.
- **Records with restricted data** will have, for registered users, a **Data for Download** button visible within the search output or listed in the record in the **Distribution** element. For non-registered users the following message will display: '**Data attached but you cannot download unless you register**'.

Some datasets are restricted to certain groups made up of registered users, please contact helpdesk (see **1.1.3 Feedback**) to enquire about gaining access to higher level restricted data.

1.5.1. Registration

1. Select the **Register to access or submit data** link from the home page. The **Self-Registration Form** is displayed;



2. Complete the following compulsory fields:
   a. **First Name (*)**
   b. **Last Name (*)**
   c. **Email (*)**

No spaces are allowed in the **First Name** or **Last Name** fields. These fields are used to determine the MEST system username.

Surnames

Surnames with non-alpha characters will be recognised during MEST user name creation.

Example – O'Neil or Banks-Smith

3. Complete the following optional fields:
   a. **Address** field
   b. **State** field

c. **Zip** (also known as **Postcode)** field

d. **Country** drop-down list

e. **Organisation/department** field

f. **Kind** drop-down list

g. **Profile** drop-down list (available options **Registered user** and **Editor**).

For MEST Versions up to 1.2, **DO NOT** select any of the other profiles listed. These roles (Administrator, User Administrator, and Content Reviewer) are reserved for staff who administer the website.

User Profiles

Registered User – select for viewing available metadata records and accessing data.

Editor – select for users who, in addition to viewing metadata and data, are interested in creating metadata records and depositing/submitting data.

4. Check that the data entered is correct, and select the **Register** button.
5. A message will display

   a. If successful, this message will appear:

      "Your registration was successful, please check your username and password in your e-mail. Thanks.

      Key registration details entered: <firstname> <lastname> (<email address>)"

The registration email should appear in the inbox of the submitted email address shortly. Follow the instructions in the email.

Registration may fail due to incorrect or insufficient information listed in the form. A warning message will appear to prompt you for the required correction.

   b. If registration fails for reasons such as incorrect validation of the information supplied, the following message will appear:

      "Sorry, registration failed, please try again later."

      OR

"Sorry, registration has FAILED because we could not send an email to the address you gave us.

Please check your details and try registering again."

OR

"Sorry, registration has FAILED because you are already a registered user.

If you have forgotten your password, please contact IMAS Data Manager on imas.datamanager@utas.edu.au

A reset password option will be available soon. If you urgently need to logon and cannot contact the IMAS data manager then re-register using a slightly different name as an interim measure.

Key registration details entered: <firstname> <lastname> (<email address>)"

The registration will need to be restarted (read through the trouble shooting steps below and then return to step 1).

For MEST Version 1.1.1+, the MEST creates usernames based on the initial of the **First Name** and the complete **Last Name**. For newly registered users with identical names to existing users, a number is added at the end of the username (for example, SmithJ001 is the username for John Smith who was second to register).

i. If the username already exists because you forgot you had signed up previously (using the same **First Name**, **Last Name** and **Email**), check in the email account for an email that contains login details.

ii. If you have lost your password, follow the Forgotten Password instructions to regain access to your account.

iii. If signing up for a second time with the same name but a different email address, to use the same account instead, contact **(Feedback)** the MEST administrator and they can update the email address details held against the original account.

c. It is advised to change the password upon receiving the registration email. Follow the instructions in the section: Change Password.

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Change to User Name

To change user name details please select the **Contact us** link from the main page.

The MEST administrator can update the user name details held against the account.

1.5.2. Logging In

To log into the MEST,

1. On the home page, enter the account details in the **Username** and **Password** fields.

2. Select the **Login** button.

The **Username** and **Password** fields are case sensitive. Make sure the **Username** matches the case as given upon registration, and the Caps Lock key is off.

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1.5.3. Change Password

Once a username and password have been provided, it is a recommendation to change the password.

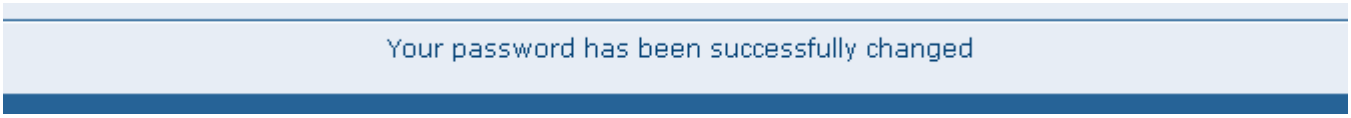
1. Select the **Administration** link from the home page.
2. Select **Change password** from the **Personal info** list. The following **Change Password** screen is displayed:

3. Enter the old (current) password in the **Old Password** field.
4. Enter the **New Password** and to reconfirm enter the new password a second time in the **Confirm new password** field.

Passwords must be a minimum of 6 characters long, and must not contain spaces. Non-printable characters can not be used.

5. Select the **Save** button.

If the password selection was successful the following screen is displayed:



If it was unsuccessful, a message will appear indicating what needs to be fixed.

- Was the **Old Password** typed in correctly?
- Does the **New Password** field match the **Confirm new password** field?
- Do spaces need to be removed from the **New Password**?
- Is the password a minimum of 6 characters?
- Were any of the fields left empty?

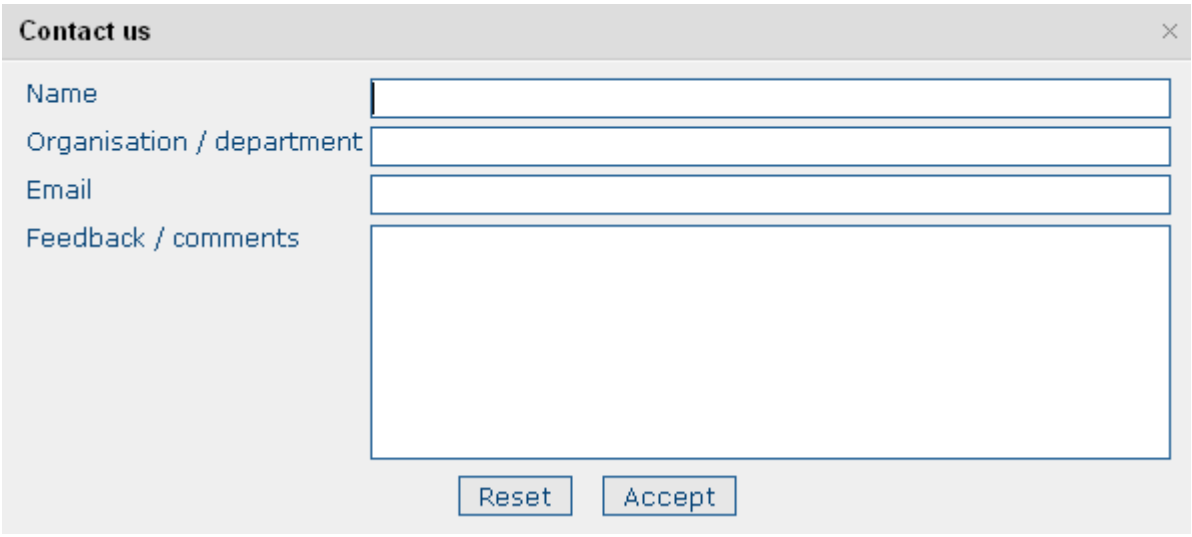
6. Close the screen and select **Close window (×)** for the **Administration** screen.

1.5.4. Forgotten Password

If the user name or password has been forgotten please select the **Contact us** link, and in the **Contact us** form fill out the following fields:

- **Name**
- **Organisation / department**
- **Email**
- **Feedback / comments** stating that password has been forgotten

Follow this by selecting the **Accept** button.



1.5.5. Logging Out

Always log out when finished using the MEST.

1. If - in addition to the main MEST window - there is a window containing a metadata record open, close it first and return to the main MEST window. Doing this prevents the metadata record becoming locked. Otherwise, continue to step 2.
2. In the main MEST window, select the **Logout** button.

3. For additional security, close the window that was used for the MEST.

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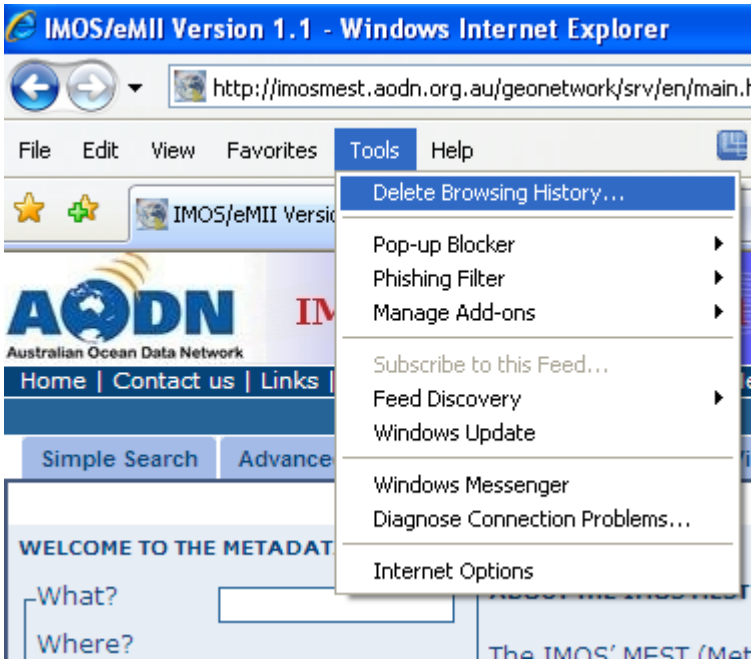
1.5.6. Clear Browser Cache

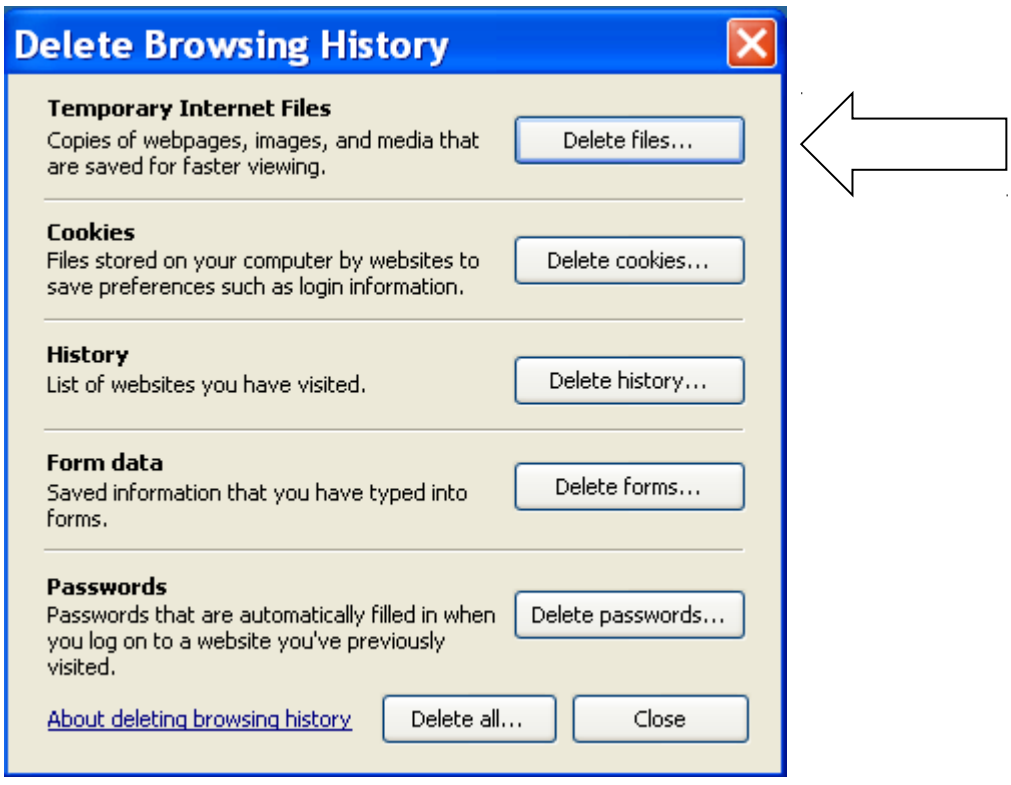
Prior to using the MEST for the first time, and after an upgrade, it is recommended to clear the existing browser cache. Failure to do so may result in limited functionality.

Internet Explorer

1. On the **Tools** menu, select **Delete Browsing History**.



2. In the **Delete Browsing History** dialog box, locate the **Temporary Internet Files** section and select **Delete files**.


Delete Browsing History
Temporary Internet Files
Copies of webpages, images, and media that are saved for faster viewing.
Delete files...
Cookies
Files stored on your computer by websites to save preferences such as login information.
Delete cookies...
History
List of websites you have visited.
Delete history...
Form data
Saved information that you have typed into forms.
Delete forms...
Passwords
Passwords that are automatically filled in when you log on to a website you've previously visited.
Delete passwords...
About deleting browsing history
Delete all...
Close

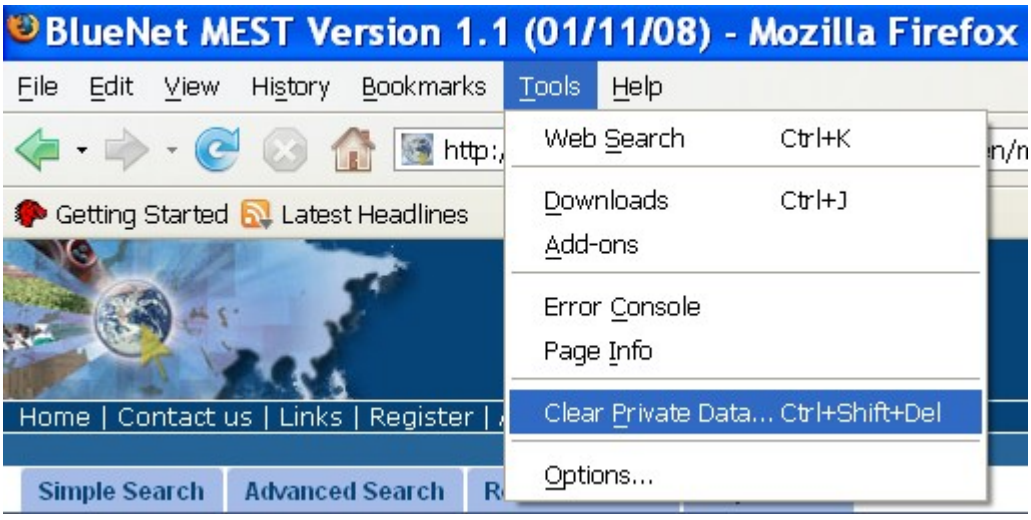
3. A **Delete Files** dialog box will appear, asking you to confirm you want to delete the temporary Internet Explorer files. Select **Yes**.

Delete Browsing History
Are you sure you want to delete all Internet Explorer browsing history?
Also delete files and settings stored by add-ons.
What does this delete?
Yes
No

4. Select **Close** when in the **Delete Browsing History** dialog box to continue with using the MEST.

Mozilla Firefox

1. On the **Tools** menu, select **Clear Private Data**.
    a. If this option is not available, see instructions for Mozilla Firefox 3.5.x.



2. In the **Clear Private Data** dialog box, tick the checkboxes next to **Cache** and **Cookies**.

3. Select **Clear Private Data Now**.

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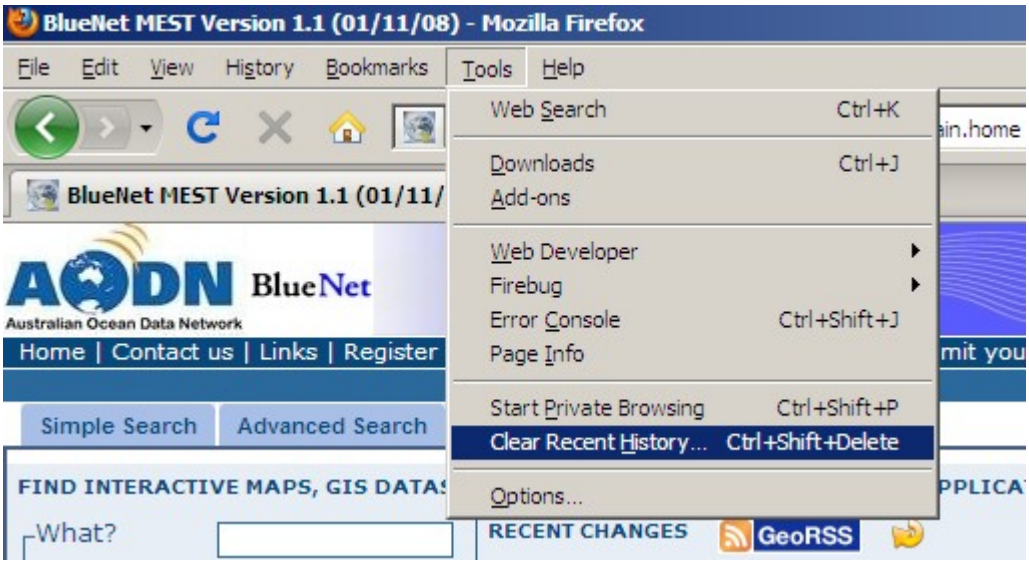
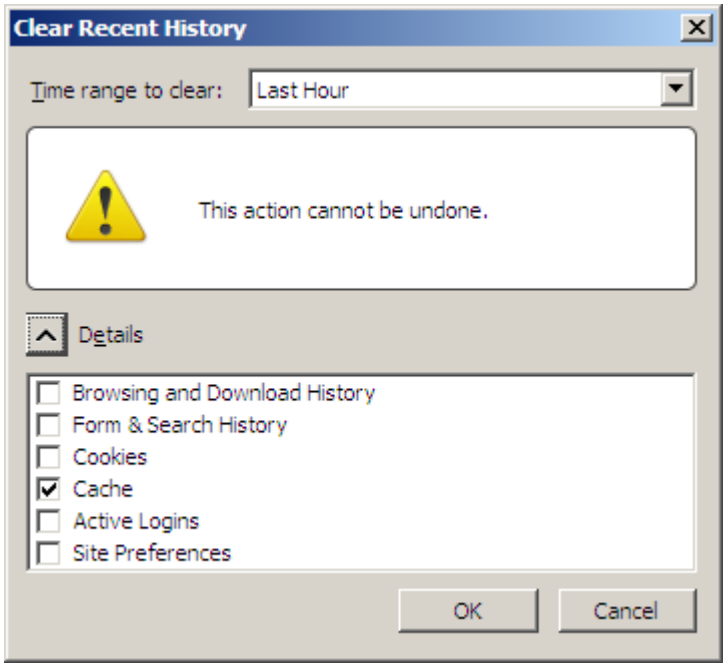
Mozilla Firefox 3.5.x

4. On the **Tools** menu, select **Clear Recent History…**



5. Expand the **Details** section using the ‘expand’ button.
6. Select **Cache** and deselect all other options. Select **OK**.



1.6. Configuring Internet Explorer to enable Opening Data Files

Earlier versions of Internet Explorer did not show a dialog box providing the options to save or open files. If you are using a version of Internet Explorer earlier than version 6, and want to download files of a particular kind, e.g. Microsoft Office applications Word, Excel etc, then configuration of Internet Explorer will be required.

To configure Internet Explorer -

1. Open **My Computer**
2. On the **Tools** menu, select **Folder options**.
3. Select the **File Types** tab.
4. In the **Registered file types** list, select the specific Office document type (for example, Microsoft Excel Worksheet), and then select **Advanced** (or **Change…**).

If the **Advanced** and **Change…** buttons are not available to select and are greyed-out, it is possible that these options have been disabled. Contact your System Administrator.

5. In the **Edit File Type** dialog box, select to clear the **Browse in same window** check box (or select to clear the **Open Web documents in place** check box).
6. Select **OK**.

Datasets should be saved with a file extension matching the document type e.g. size_lip.xls for Microsoft Excel spreadsheets or survey.csv for comma separated value files.

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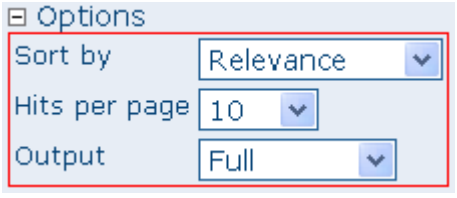
2. SEARCH

The following options are available to users of the MEST:

- **Simple Search** (the default search type) - a simple free text or location search;
- **Advanced Search** - a more detailed search where users can specify which areas of a record the search term will apply, **Advanced Search** also performs a more detailed geographic search, and can filter results based on date created/modified, catalogues, categories, and associated groups.
- **Remote Search** - the default search option searches the content of the local MEST, Remote Search includes the function of searching geospatial catalogues of data not hosted on the server, e.g. US catalogues.

2.1. Output Options

To adjust the presentation of the search results, select the **[+]** button for **Options** or the **Options** link itself.



The output options include adjusting how results are sorted, the number of **Hits per page**, and whether results are presented in **Output** that is **Full** (including thumbnail images and ratings area) or **Text only** (just text and small logos).

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2.2. Tips for Searching

The number of likely hits for a search topic will be determined by the search method and selection criteria, listed below are general tips worth noting.

- Avoid being too specific in the search, start with more general search terms before narrowing the search with very specific terms, e.g. if you are looking for data on coral spawning, start by typing in ‘coral’ to determine the extent of coral data available.
- Avoid using odd punctuation such as ?, *, ~, etc. (Some symbols are acceptable in certain circumstances: full-stop (.) and comma (,) for search terms like “A.R.C” and “2,000”; single quote (‘) for words like “owner’s”; ampersands (&) and at symbols (@) can be used once in a search term made of letters, such as “email@address.com”; hyphens (-) and underscores (_) can only be used in a search successfully when in terms containing numbers or number-letter combinations).
- Boolean operators (e.g. “AND”, “OR”, “NOT”) can be used to search the MEST, and remote catalogues. They are not case sensitive. Please note that “NOT” can not be used at the start of the search terms.
- A wildcard symbol (*) can be used to truncate terms and expand a search (but only at the end of a partial word, e.g. trunc* - not inside a word like trunc*te).

It is **important** to use the wild card symbol (*) while using **Simple Search** if you are uncertain about spelling. **Simple Search** will find whole words only.

*Alternative – Using the **Advanced Search** change the Spelling match level.

- Phrase searching? Double quotes can be used around text to look for an exact phrase. Because it is an exact phrase the Boolean operators (e.g. “AND”, “OR”, “NOT”) will not work inside “double quotes”.
- To search using a phrase when searching, for example, a record with odd punctuation (non-alphanumeric characters) in the title, remove non-standard characters, so a record containing "Where? Australia." is found using the search terms "where australia", and "(1942 - 2005)" is found in a search for "1942 2005". An exception to this is when hyphens (-) are within a keyword containing numbers, in which case a record containing "30-42" will be found by searching for "30-42".
- Text and operators are not case sensitive.
- Nested searches are not available.
- Related records in the local MEST can be searched for and discovered via two mechanisms:
    - Parent Identifiers: A record is identified as a parent record if its unique File Identifier is listed in the Parent Identifier field of any other record. A parent record is used to indicate that a child record inherits information from a higher record order within the MEST therefore alerting the user to the file id of the parent record. It is possible to find child records by conducting a search by the File Identifier of the parent record (using the To Search – Free Text: search option). The first 5-6

characters of the File Identifier (also known as the UUID – Universal Unique IDentifier), truncated with a '*', is sufficient to find the record (e.g. '2b4cfcf0*')

When searching for related records, should I put the File Identifier (UUID) in the 'Free Text' field or the UUID field?

The **Free Text** field. Putting the UUID in the UUID field would tell the search form to only look for records that own that file identifier, instead of files that are related to that file identifier.

- Aggregations: Related records can be linked by a common generic title in the **Aggregation Information** section of each record. Find these records by conducting a **Free Text** phrase search, using part of the title of the aggregation. Aggregation information is a more flexible way of linking metadata records.

Understanding the Search Results

There are a number of situations where the search results are not as expected, in particular when using the free text Simple Search.

Examples include, searching for a particular author, UUID or record ID.

- The author may also be referenced within other records as the record contact or within the credit or supplemental information.
- If parent and child records exist each will have a reference to the same UUID.

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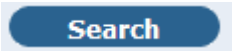
2.3. Simple Search

The **Simple Search** option allows searches to be conducted in two main ways: either a free text search for words or phrases, including keywords, occurring anywhere in a published metadata record, or to conduct a search for metadata describing a resource associated with a particular geographic area.

2.3.1. To Search – Free Text:

1. From the home page, select the **Simple Search** tab.
2. Enter the search term, or terms, in the **What?** (also known as 'free text') field.
3. Press return or select the **Search** button 

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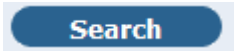
Free Text Search – One or more thematic keywords or strings in quotes can be typed. For example, Keywords, Names, Surnames and Species Names can be searched.

If the words *Estuary Macroalgae* are typed, the search will look for any occurrence within the metadata of the word Estuary and any occurrence of the word Macroalgae.

2.3.2. To Search – Geographic Location:

Adjust the map to the appropriate scale using the zoom and pan options on the Map Tool Bar, located above the map.

1. Select the required zoom or pan icon from the Map Tool Bar.
2. Click on the map and drag across the required location.
3. Select the area to search using the **Select an Area of Interest** icon (the icon on the right hand side of the Map Tool Bar), drag across the required area on the map.
4. Select the **Search** button 

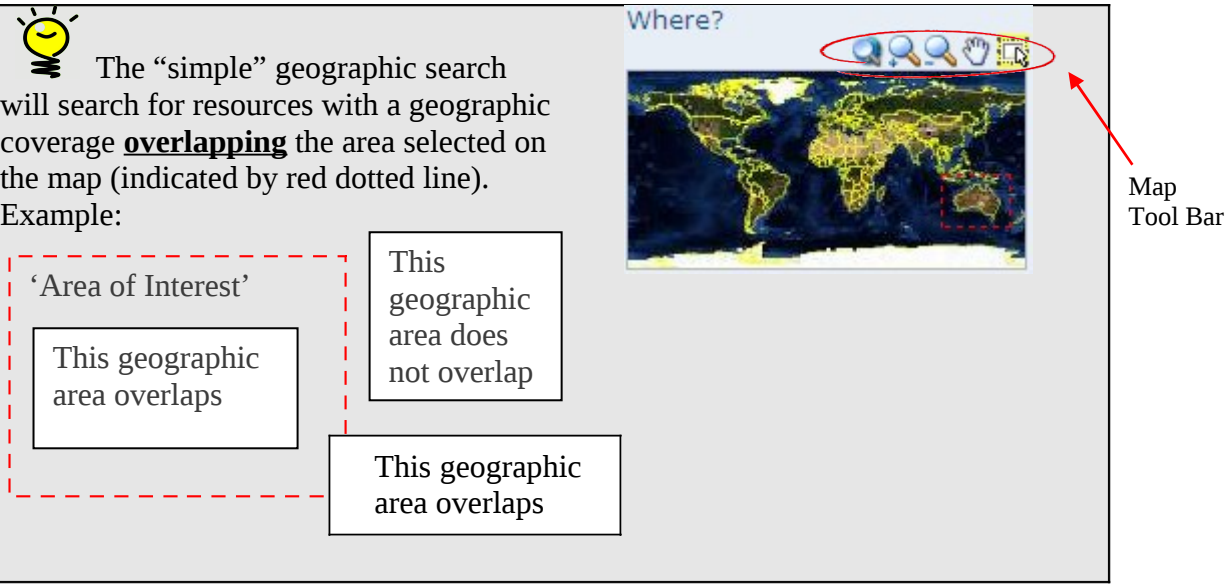
Geographic Area Selection

Ensure that the **Select an Area Of Interest** option from the Map Tool Bar is used to identify the search area. A red dotted area will indicate that an area of interest has been selected.

Using the **Zoom in** option is not sufficient to define the required search area.

Caution – it is possible to select the area of interest prior to using the **Zoom in** option, this may result in the area boundary lines to be outside of the view.

The "simple" geographic search will search for resources with a geographic coverage **overlapping** the area selected on the map (indicated by red dotted line).
Example:



2.3.3. Reset Search:

Search options can be reset at any time –

To reset a Search (Free Text or Geographic) in MEST version 1.1+:

Select the **Reset** option located below the **Search** button.

To reset a Free Text Search in MEST version 1.0:

Select the **Reset** option located below the **Search** button.

To reset a Geographic Location Search in MEST version 1.0:

When the map area of a search has been used, the search options need to be reset manually. Select the **Zoom to full map extent** icon above the map (or select the '**Any**' option of the Geographic Area drop-down list below the map), and then select the **Reset** option located below the **Search** button.

Selecting the **Reset** button only is not sufficient to return the complete Map Area.

Refreshing the search page or switching between search options does not reset the search. You must select **Reset** to remove any saved searches.

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2.4. Advanced Search

The **Advanced Search** allows the users to be more specific in the search criteria. Options include, search particular metadata fields, search by geographic or temporal extent and search particular resource types (categories).

Within the **Advanced Search** it is possible to enter text into specific fields and/or modify the search as follows -

Restrict search to records that:

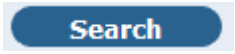
- have **Data for download** attached;
- have **Interactive Maps** attached;
- match additional geographic search options;

- match the selected time coverage.

Conduct more or less **Precise** matching of search terms.

The available search fields are organised into 3 main sections: What?, Where? and When?

2.4.1. How to Use Advanced Search:

1. From the home page, select the **Advanced Search** tab.
2. Enter the specific content, geographical or temporal search criteria.
3. Select the **Search** button 

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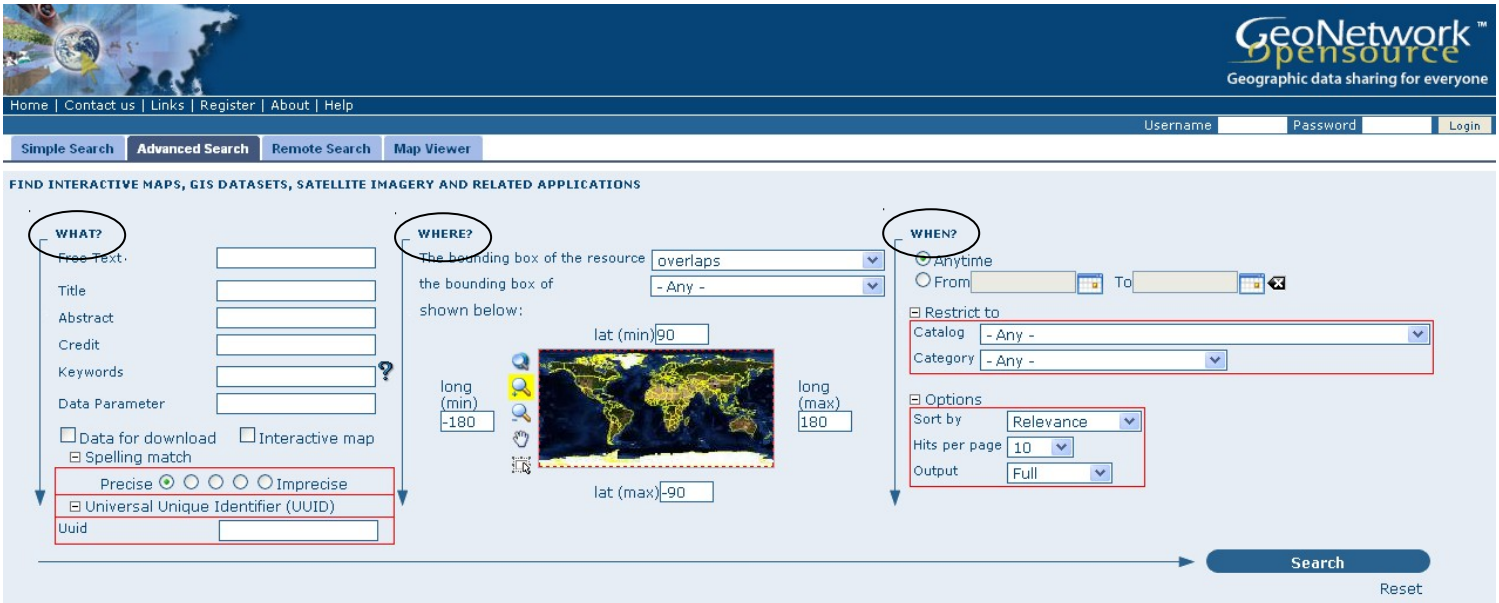
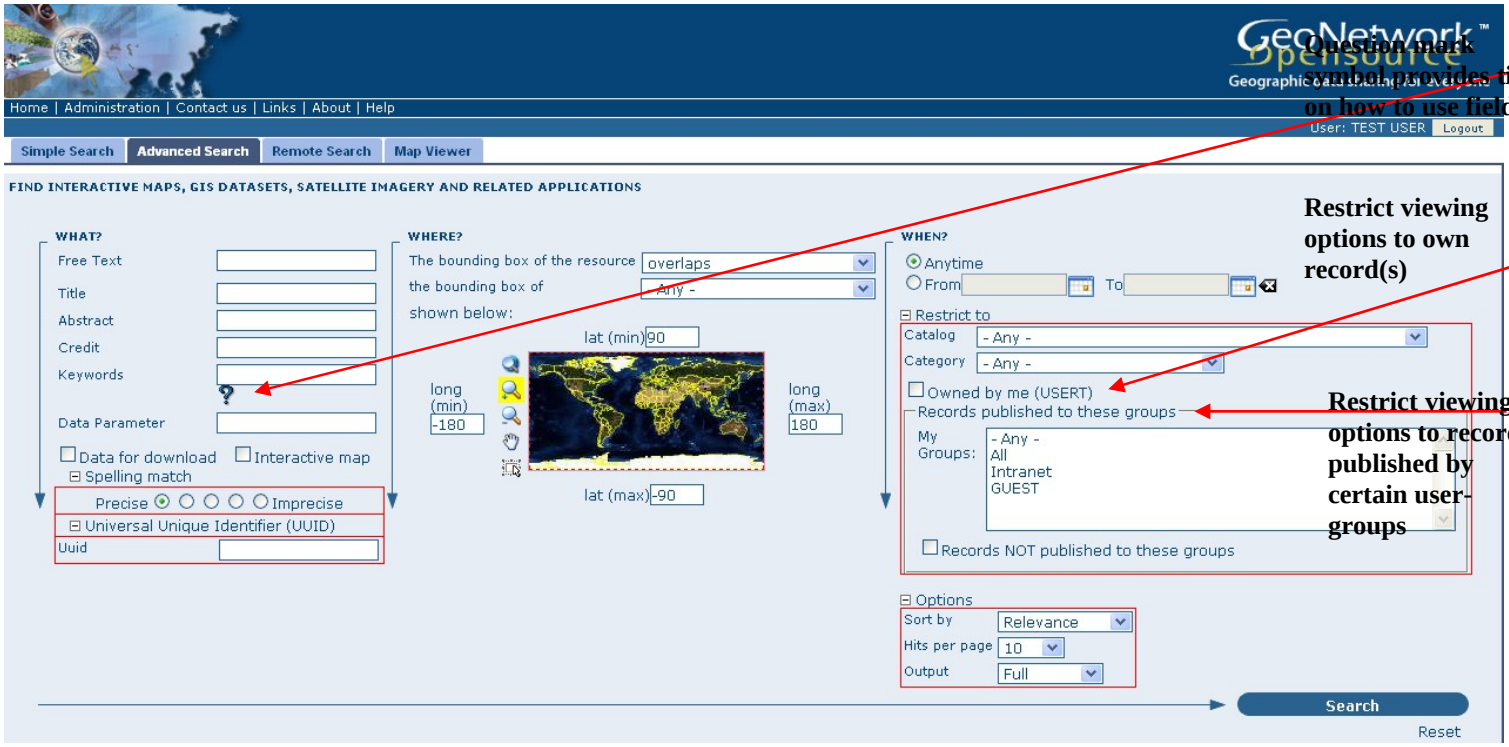
Information can be added into one or more field(s) to complete a search. If you do not want to search by a given field simply leave that field blank.

The following **Advanced Search** screen is displayed to non-registered MEST users.



The following **Advanced Search** screen is displayed to **registered** MEST users.
A **registered** user has more viewing rights to metadata records on the MEST and can restrict their viewing options to their own records, or to specific groups they are part of.



2.4.2. What?

In the **What?** section it is possible to search either for text located anywhere in a metadata record, the **Free Text** field, or for text located in some of the main fields contained within a metadata record.

The metadata fields that can be directly searched -

- **Title** (identify records that contain search terms anywhere in a metadata record),
- **Abstract** (identify search terms specifically in the abstract of the record),
- **Credit**,
- **Keywords** (identify records by entering commonly used word(s), formalised word(s) (see further information below) and/or phrase(s) used to describe the dataset), and
- **Data Parameter** (identify records with parameters or variables used to describe the data set e.g. Degrees Celsius, Metres, etc.).

Search Tips for the Data Parameter and Keywords fields

The section Tips for Searching also applies to the **Data Parameter** and **Keywords** fields.

Typing in the first few letters of words that exist in either the **Keyword** or **Data Parameter** fields will result in a selection list being presented. If no list is presented the word has not been stored within a **Keyword** or **Data Parameter** field.

Keywords

The pre-emptive words are resultant of words that have been entered into existing metadata records; includes GCMD thesaurus selections, free text, geographic locations and CAAB codes.

Data Parameters

The data parameter field facilitates focussed searching of particular types of data and assists the searcher to identify the content of the data files, and search for similar elsewhere.

The pre-emptive words appearing within the Data Parameters field are those already stored within a record.

The search results can be restricted to records with –

- **Data for download**, or an
- **Interactive map**

Why have my search results returned metadata records without downloadable data, even though I searched using the 'Data for download' option?

*This question applies to MEST versions up to and including version 1.1, but does not apply to MEST version 1.2 and later.

The search results return records that contain downloadable data, based on the protocol used during file upload, whether or not that data is accessible. Some data is only accessible when you are logged in as a registered user, while other data is only available to members of private groups.

Records with only files with the protocol of **Other file for download** will not be found in a search restricted to **Data for download**.

If you are interested in what the data of an associated record may contain, contact the **Point of Contact** person listed on the record.

Previous versions of the MEST used different criteria for searching "Downloadable Data". MEST versions 1.2 and later will prevent the occurrence of records showing in search results without available data being displayed.

How do I search for particular funding schemes and/or organisations associated with a resource?

The **Credit** field is used to indicate records related to a particular funding scheme or organisation, such as IMOS, ARC, CSIRO or University of Western Australia.

To search for a particular funding scheme or organisation, e.g. IMOS, enter "IMOS" in the **Credit** field.

2.4.3. Where?

The **Where?** section allows searching for metadata associated with a particular geographic area.

The **Where?** option allows manual entering of coordinates or the ability to quickly select an area using the drop-down menu from **the bounding box of**.

It is possible to request that records/metadata presented in the search result describe either:

- the exact geographic area specified (**equals**);

- an area/location that overlaps with the geographic area specified (**overlaps**);
- an area/location completely enclosing the geographic area specified (**completely contains**);
- an area/location located outside the geographic area specified (**is completely outside of**);
- an area/location located inside the geographic area specified (**is completely contained by**)

How can I select a more precise geographic location?

If you wish to make a more precise geographical search:

1. Navigate to the **Map Viewer**.
2. Use the **Add Marker** tool to establish the boundaries of the area you want to search (such as one marker for the top left corner and one marker for the bottom right corner).
    a. It is possible to specify a single point location. To do so, the maximum latitude - **lat (max)** must be equal to the minimum latitude **lat (min)** and the maximum longitude **long (max)** must match the minimum longitude **long (min)**.
3. Make a note of the latitude and longitude coordinates of each marker (select the **Marker List** tool to view details).
4. Return to the **Advanced Search** page, and enter the coordinates into the **lat** and **long** fields.

More information about the **Map Viewer** is available in the MAP VIEWER chapter.

How come the results are not how I expected when I used the 'is completely contained by' option?

While this option is visible, it is not functional in MEST version 1.0. Please do not use this option unless the MEST is version 1.1+.

Coordinates entered manually –

The following icon will appear if the map coordinates have been altered manually;

, select this to update the displayed **Area of Interest** boundary on the map image or to display received warning messages.

Refer **To Search – Geographic Location:** to use the Map Area to define the geographic search criteria.

Geographic Area Selection

Ensure that the **Select an Area Of Interest** option from the Map Tool Bar is used to identify the search area. A red dotted area will indicate that an area of interest has been selected.

Using the **Zoom in** option is not sufficient to define the required search area.

Caution – it is possible to select the area of interest prior to using the **Zoom in** option, this may result in the area boundary lines to be outside of the view.

2.4.4. When?

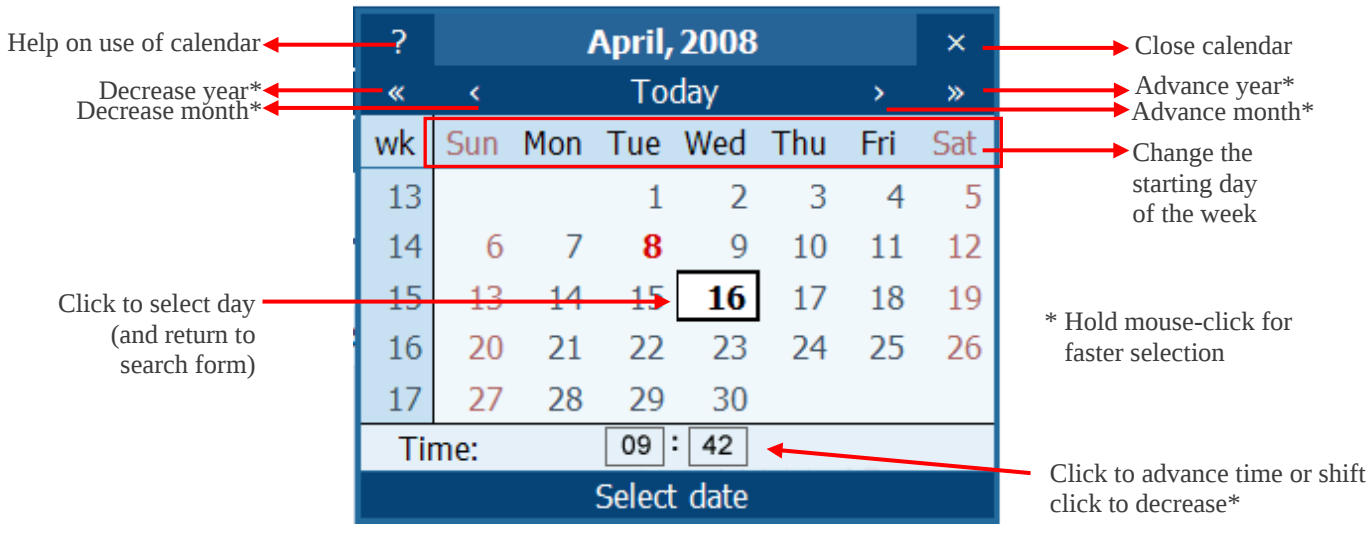
The **When?** section allows searching for records/metadata describing a resource (typically a dataset) which has particular time coverage known as the **temporal extent** section of the metadata.

The temporal extent refers to the coverage of a resource (e.g. sampling start and end dates).

When searching using the **From** and **To** fields, the MEST looks for records that *overlap* the specified time period (from MEST version 1.2 onwards). For example, a search for the period ranging from 26 August 2009 to 29 August 2009 will find a record with a temporal extend of 28 August 2009 to 31 August 2009.

In earlier MESTs up to version 1.2, an identical search would return records that were *contained* within that time period, such that a search for the period ranging from 26 August 2009 to 29 August 2009 *would not* find a record with a temporal extend of 28 August 2009 to 31 August 2009.

To select a **From** and **To** date and time, click on the calendar icons on the right. Refer to the below diagram for guidelines on how to select a date and time using a calendar.



What time zone is being used when I search?

When performing an advanced search using the **When?** section, the time zone used in searching for records is the standard coordinated universal time (UTC).

The **When?** section searches the temporal extent area of each record. It does not search in creation, revision, or publication dates.

In future releases, users will be able to pick the time zone they are in.

2.4.5. Other Advanced Search Options

What?

- **Data for download** – By ticking this checkbox the search can be limited to only records that contain downloadable data.
- **Interactive map** – By ticking this checkbox the search can be limited to only records that have interactive maps attached. The interactive map is viewed using the MAP VIEWER.
- **Spelling match** - Fuzzy logic can be used to correct for spelling mistakes by selecting an option between **Precise** and **Imprecise**.
- **Universal Unique Identifier (UUID)** – search for a file based on its Universal Unique Identifier. This is especially useful in situations where multiple metadata records might have an identical title, or where one metadata record's title has changed over time. Click on the **[+]** or the link **Universal Unique Identifier (UUID)** to reveal where to enter the **UUID** field.

When?

The following options are available by expanding the **Restrict to** section **[+]**.

It is advised that once the **Restrict to** section has been expanded and changes made, it should not be collapsed. This is because the **Restrict to** section remembers settings even when collapsed, making it possible for a search to be inadvertently restricted. If in doubt, select the **Reset** link.

- **Catalog** – restrict a search according to which catalog the records belong to.

- **Category** – search for certain record or data types by choosing an option from the category list.
- **Kind** – option to choose to search either for metadata records or templates of metadata records (editors only).
- **Group** – Once logged in, search for (and view) records belonging to a particular MEST user-group. The drop-down list of groups will only list those groups that have given you permission to view their records. Note that leaving the option as - **Any** - will show all records that you are allowed to view.

Not all records made by a user group have been made available to the public. This search option is unavailable, unless a registered user is logged in.

The following options are available in the **Options** section **[+]**.

- **Sort by** – arrange results by **Relevance**, **Rating** (available in a future release), **Popularity**, or **Change Date**.
- **Hits per page** – the number of metadata summaries displaying on each page.
- **Output** – display results with or without thumbnail images.

2.4.6. Reset Search:

Search options can be reset at any time –

To reset a Search (Free Text or Geographic) in MEST version 1.1+:

Select the **Reset** option located below the **Search** button.

To reset a Free Text Search in MEST version 1.0:

Select the **Reset** option located below the **Search** button.

To reset a Geographic Location Search in MEST version 1.0:

When the map area of a search has been used, the search options need to be reset manually. Select the **Zoom to full map extent** icon above the map (or select the 'Any' option for **the bounding box of**), and then select the **Reset** option located below the **Search** button.

Selecting the **Rest** link only is not sufficient to return the complete Map Area.

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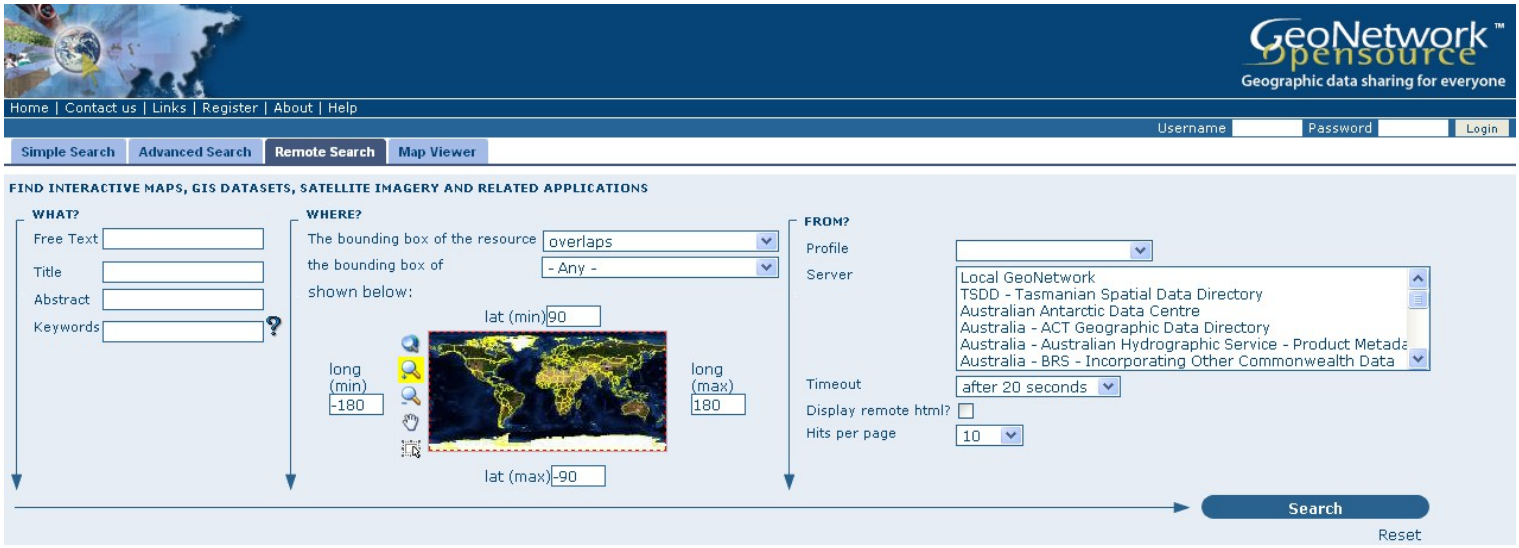
2.5. Remote Search

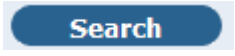
The **Remote Search** tool allows users to search the MEST and other remotely located catalogues simultaneously. A **Remote Search** will provide matching metadata records from the remote catalogues that have been selected.



2.5.1. How to Use Remote Search:

1. From the home page, select the **Remote Search** tab.
2. Enter the search terms or geographical search criteria (see What? and Where? below for more details).

> To display more hits per page, change the **Hits per page** option now before selecting servers, to prevent the server choices being lost.

3. Enter the **Profile** and **Server** criteria in the **From?** section (see From? below).
4. Change the remaining **Remote Search** options as required (see Other Remote Search Options).
5. Select the **Search** button 

2.5.2. What?

- **Free Text** – Identify records that contain search terms anywhere in a metadata record.
- **Title** - Identify records that contain search terms specifically in the title of a record.
- **Abstract** - Identify records that contain search terms specifically in the abstract of a record.
- **Keywords** - Identify records that are associated with a keyword or set of keywords.

2.5.3. Where?

The **Where?** section allows searching for metadata associated with a particular geographic area.

The **Where?** options allow manual entering of coordinates or the ability to quickly select an area using the drop-down menu from **the bounding box of**.

Records/metadata presented in the search result (from MEST version 1.2.2+) describe:

- an area/location that overlaps with the geographic area specified (**overlaps**).

Do not use these options if the MEST version is prior to 1.2.2:

- the exact geographic area specified (**equals**);
- an area/location completely enclosing the geographic area specified (**completely contains**);
- an area/location located outside the geographic area specified (**is completely outside of**);
- an area/location located inside the geographic area specified (**is completely contained by**).

These options are not available in MEST version 1.2.2 onwards, as external Z39.50 servers are unable to interpret them.

How come the results are not how I expected when I used the 'is completely contained by' option?

While this option is visible, it is not functional in MEST version 1.0. Please do not use this option unless the MEST is version 1.1+.

Coordinates entered manually –

The following icon will appear if the map coordinates have been altered manually; , select this to update the displayed **Area of Interest** boundary on the map image or to display received warning messages.

Refer **To Search – Geographic Location:** to use the Map Area to define the geographic search criteria.

Geographic Area Selection

Ensure that the **Select an Area Of Interest** option from the Map Tool Bar is used to identify the search area. A red dotted area will indicate that an area of interest has been selected.

Using the **Zoom in** option is not sufficient to define the required search area.

Caution – it is possible to select the area of interest prior to using the **Zoom in** option, this may result in the area boundary lines to be outside of the view.

2.5.4. From?

To display more (or less) hits per page, change the **Hits per page** option before selecting **Server**.

If **Hits per page** is selected after selecting **Server**, the server preferences may be lost. The servers picked by automatically selecting servers through choosing a **Profile** will remain, but the servers selected manually will be deselected.

Profile - By selecting a profile, it is possible to automatically select a predefined list of servers. For example, you might want to select all the servers with ocean data, so you would then select the profile named **Ocean-related nodes**.

Servers - Use the **Server** drop-down list to select the preferred remote servers. For multiple selections, hold down the control key (Ctrl) and click on the selections. To

deselect one server at a time, hold down the control key and click the selection once more.

The local MEST server (also known as Local GeoNetwork) is also listed in the list of remote servers (useful for some of our users).

Want an unlisted remote server added? Contact the Helpdesk (see **1.1.3 Feedback**) with the remote server details and they will arrange for the server to be listed.

Metadata results obtained from a third party server, via the **Remote Search** option, may not have been created with the same standards or be ISO compliant.

2.5.5. Other Remote Search Options

Timeout – This option specifies how long the MEST can search remote servers before it must stop. It is recommended that the maximum **Timeout** option in the drop-down menu is selected.

Display remote html - It is possible to view the metadata records in either the format of the MEST or the format of the original record. Images within records may not be visible if the record is viewed in the MEST format and you may not be able to access data. To view all records in their original format check the **Display remote html** box.

Hits per page - Regulate the number of **Hits per page** by using the drop-down menu.

Why didn't all results return from the Remote search?

Some records are only visible when registered users are logged into the local MEST. These records will not be retrieved (even if logged in) when a search is conducted against the local MEST using this **Remote Search** tab.

The remote search conducts a search only for records available to the general public (i.e. only records that are available via a local search of the MEST, not to the general public, will be identified in a remote search).

2.5.6. Remote Search Results:

In addition to the common elements of the search results area, there are elements of the results that are specific to the **Remote Search** tab. Details about the common elements of the search results area are available at the start of the VIEWING AND DOWNLOADING chapter.

The server title, displayed in red text, is the server the record originated from.

2.5.7. Reset Search:

Search options can be reset at any time –

To reset a Search (Free Text or Geographic) in MEST version 1.1:

Select the **Reset** option located below the **Search** button.

To reset a Free Text Search in MEST version 1.0:

Select the **Reset** option located below the **Search** button.

To reset a Geographic Location Search in MEST version 1.0:

When the map area of a search has been used, the search options need to be reset manually. Select the **Zoom to full map extent** icon above the map (or select the **Any** option for **the bounding box of**), and then select the **Reset** option located below the **Search** button.

Selecting the **Rest** button only is not sufficient to return the complete Map Area.

To return to a Simple Search of the MEST select the **Simple Search** tab, at the top of the Search options area.

2.6. Customised Searching

This feature is available in MEST version 1.2 and 1.2.1 onwards.

In addition to finding data using the available search forms (as covered in chapter **2. SEARCH**), it is also possible to perform searches as part of the URL. This enables searches to be saved as links.

To create a custom search from a URL, use the available parameters from the Table of Custom Search Parameters below. The parameters can be added to the end of one of the below URLs:

IMAS: http://mest.imas.utas.edu.au/geonetwork/srv/en/main.home

Combined parameters example

http://mest.imas.utas.edu.au/geonetwork/srv/en/main.home?tab=advanced&northBL=-10&southBL=-44&eastBL=180&westBL=0&hitsPerPage=100

Phrase, truncation and boolean searching apply to **Free Text**, **Title**, **Abstract**, **Keywords**, **Data Parameter**, and **Credit**.

Reset the search form before using a link to a MEST custom search if there is already an instance of the MEST open. Performing a search from the URL adds search options to the form, however, any fields that have previously been filled in that are not used in the URL parameters will not be reset; hence the resulting search could become more restricted than expected.

2.6.1. Table of Custom Search Parameters

	Example	**Tabs**
	?**tab**=advanced *Options include:* [simple|advanced|remote|mapviewer]	N/A
Automatic search	?**search**=true *Options include:* [true|false]	simple |advanced |remote
Hits Per Page	?tab=simple&**hitsPerPage**=50 *Options include:* [10|20|50|100]	simple |advanced |remote
Sort By	?tab=simple&**sortBy**=date&output=text *Options include:* [relevance|rating|popularity|date]	simple |advanced |remote
Output	?tab=simple&sortBy=date&**output**=text *Options include:* [text|full]	simple |advanced |remote
Free Text	**any**=example	simple |advanced |remote
Title	**title**=example	advanced |remote
Abstract	**abstract**=example	advanced |remote
Credit	**credit**=IMOS	advanced |remote

Keywords	**themeKey**=%22oceans%22 *themeKey is the parameter name for Keywords. %22 replaces "double quotes".*	advanced |remote
Data Parameter	**dataparam**=%22sea water temperature%22 *Data Parameter "sea water temperature". %22 replaces "double quotes".*	advanced |remote
Data for Download	?**download**=on&search=true *To leave switched off, omit this parameter.*	advanced
Interactive Map (dynamic)	**dynamic**=on *To leave switched off, omit this parameter.*	advanced
Spelling Match: Precise = 1 Imprecise = .2	any=tent&**similarity**=.6 *Options include:* [1|.8|.6|.4|.2]	advanced
Universal Unique Identifier (UUID): Uuid	**uuid**=ac1dea4a-1bb4-495c-938e-b4468ae6bee5 *Constraints: must be a hexadecimal number like format shown in example.* ffffffff-ffff-ffff-ffff-ffffffffffff	advanced
'Any' drop-down box	?tab=simple&**region**=10 *(see …***the bounding box of** (region) *for info)*	simple
The bounding box of the resource (relation)	region=338&**relation**=equal *Search for records with area matching Africa. Options include: (advanced)* [overlaps|equals| encloses|fullyOutsideOf|fullyWithin]; *(remote)* [overlaps]	advanced |remote
…**the bounding box of** (region)	**region**=338&relation=equal *Search for records with area matching Africa. To find out the code that belongs to the corresponding geographic location, refer to Appendix 2: Country ID Reference List, or use '**the bounding box of**' region field and perform an advanced search. Look in the '**Your advanced search was**' message for the region code.*	advanced |remote
Lat (min) (northBL) **Long (min)** (westBL) **Long (max)** (eastBL) **Lat (max)** (southBL)	?tab=advanced&**northBL**=-10&**southBL**=-44&**eastBL**=180&**westBL**=0 *Options include:* northBL: [-90 to 90] (but greater than southBL) eastBL: [-180 to 180] (but greater than westBL) westBL: [-180 to 180] (but less than eastBL) southBL: [-90 to 90] (but less than northBL) **Definition of axes:** Latitude positive North • -90 = south pole, • 90 = north pole Longitude positive East • 0-360 where 0 = Greenwich Meridian	simple |advanced | remote
From	?tab=advanced&**dateFrom**=2009-07-	advanced

(dateFrom) **To** (dateTo)	01T15:19:03&**dateTo**=2009-07-31T15:19:03 *Constraints: must be in format shown in example.* [YYYY-MM-DD**T**hh:mm:ss]	
Catalog	?tab=advanced&**siteId**=27903d5d-940a-44da-8f87-04cfbff6b194 *Where emiidev siteId is* 27903d5d-940a-44da-8f87-04cfbff6b194. *To find out what the **siteID** of the **catalog** is, perform an **advanced search** with the chosen **catalog**, and look in the '**Your search results were**' message for the parameter pair that starts with **siteId**.*	advanced
Category	?tab=advanced&**category**=audioVideo *To find out what the **category** ID is, perform an **advanced search** with the chosen **category**, and look in the '**Your search results were**' message for the parameter pair that starts with **category**.*	advanced
My Groups	?tab=advanced&**groups**=2 *Where ID of Sample Group is 2.* *To find out the ID of the group you want to perform a custom search upon,* 1. *Login and navigate to the **Advanced Search** form.* 2. *In the **Restrict to** section, select the preferred group (no more than one group at a time) from the **My Groups** field.* 3. *Select **search**.* 4. *On the results page, look through the **Your search results were** message for the data parameter pair that starts with **groups**. The associated number is the ID of the group you selected.*	advanced
Records NOT published to these groups	?tab=advanced&**notgroups**=on *If you wish to search for the default 'records published to these groups', omit this parameter.*	advanced
Display remote html? (serverhtml)	?tab=remote&**serverhtml**=on *If you wish to search for the default of not displaying remote html, omit this parameter.*	remote
Timeout	? tab=remote&**timeout**=30&servers=localhost:2100/geonetwork,147.109.254.5:5550/tas *Options include:* [after 10|20|30 seconds]	remote
Profile	? tab=remote&**profile**=203.49.66.2:5550/product%20134.178.63.133:6668/bom_meta%20150.229.226.17:6668/marlin%20150.229.226.17:6668/neptune	remote

	%2059.154.117.67:5550/pages_xml *To find out what the correct term is for the chosen profile, contact helpdesk (see* **1.1.3 Feedback***) and they can provide the correct term for you.*	
Server (servers)	?tab=remote &**servers**=203.49.66.2:5550/product *For searching a single server instance* ? tab=remote&timeout=30&**servers**=localhost:2100/geonetwork,147.109.254.5:5550/tas *For searching multiple server instances* *To find out what the correct term is for the chosen profile, contact helpdesk (see* **1.1.3 Feedback***) and they can provide the correct term for you.*	remote

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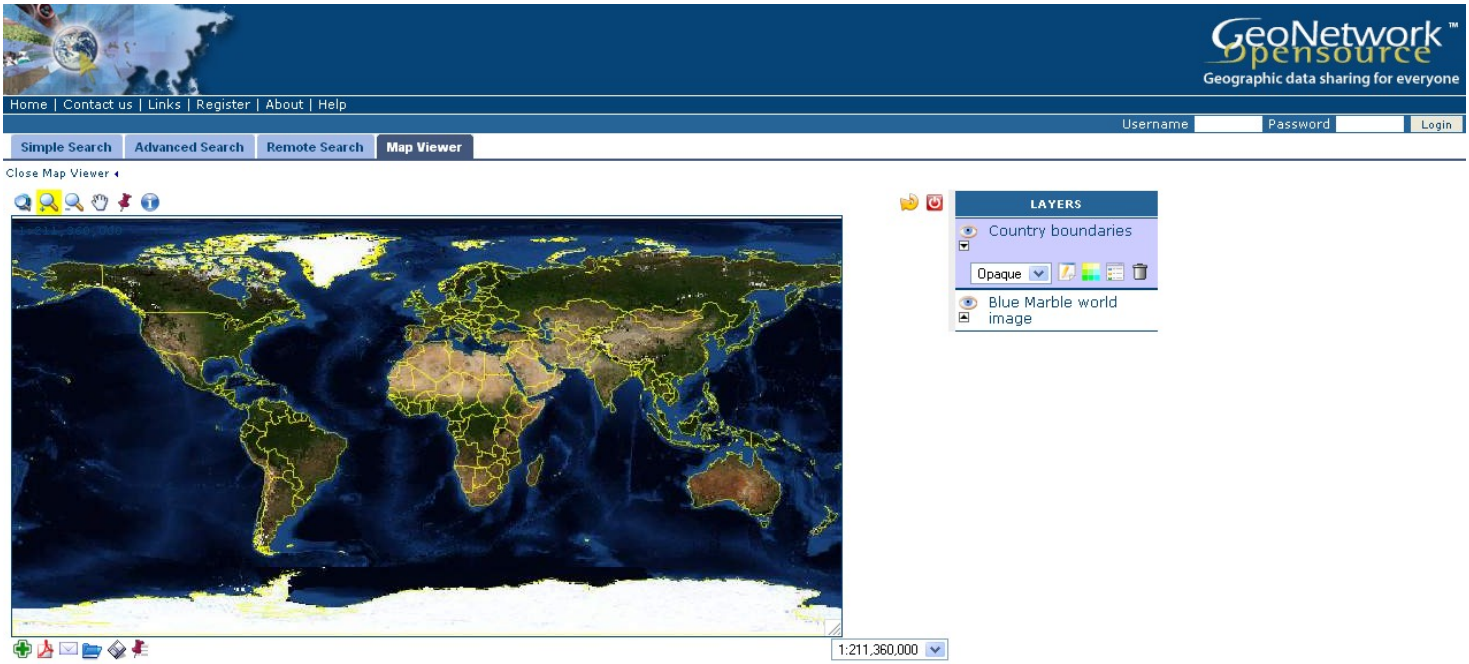
3. MAP VIEWER

Map Viewer is an interactive map generated by the Geonetwork that allows the user to create, view and manipulate map layers over a chosen area and/or scale.

The Map Viewer can be used to: view **Interactive Maps**; change the viewing area of the map; change the order, style, opacity and visibility of map layers; add, view and edit markers; and export maps as PDF. In future releases, there will also be the ability to open, save, and email map contexts.



3.1. The Map

The map is the primary focus of the **Map Viewer** area. It allows the user to view an area over different scales, from a global scale (map ratio: 1:190,488,192) to a local scale (map ratio: 1:1,000). The surrounding toolbar options provide different viewing options including zooming, panning, marking and identifying landmasses on the map. These are explained below (see section **3.2 Top toolbar icons:**).

Avoid clicking the map area repeatedly in quick succession in order to avoid slow loading times or potentially crashing the browser.

The Map Viewer utilizes the Blue Marble map from NASA's Visible Earth website: http://visibleearth.nasa.gov/.

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3.2. Top toolbar icons:

Zoom to the full map
Refocuses the map view back to the default view (global perspective).

Zoom in
Zooms the map into a closer view of the selected area.

To use – Select the button from the toolbar. Hold the mouse button down while dragging over the desired area.

Zoom out
Brings the map back to a larger view of the selected area.

To use – Select the button from the toolbar. Hold the mouse button down while dragging over the desired area.

Pan
Allows the user to view other areas of the map other than those in current view while keeping the same scale.

To use – Select the button from the toolbar. Drag the mouse in desired direction.

Add Marker
Adds a marker to the map to record the name and coordinates of a specific location.

To use – Select the button from the toolbar and click on desired location on the map. A small box will appear, displaying the coordinates of the location (**Lat** and **Lon**), and a marker name field. Enter a name and select the icon to save the marker, or to cancel.

Identify a feature on the map

Identifies landmasses on the map.
To use – Select the button from the toolbar and click on the part of the map to be identified (this applies only to landmasses – oceans are not included). A separate window is generated containing details of the landmass.

A yellow background behind the tool icons indicates the current tool in use.

Refresh
Refreshes the map viewing area.

Reset
Returns the map to the default settings.

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3.3. Layers

The Layers in the MEST Map Viewer utilize the OpenLayers geographical tool. This allows for multiple maps to be layered over each other. The OpenLayers website is: http://www.openlayers.org/.

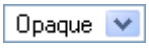
The current layer selected in the **LAYERS** section is indicated by a blue background.

Each entry in the layer section contains the following:

Title
The **Title** of the layer (by default, there are two layers included: **Country boundaries** and **Blue Marble world image**).

Show or hide layers
Hides or displays the selected layer on the map.

Move layer up/Move layer down
Shifts selected layer downwards or upwards.



Set transparency
Sets the transparency of the selected layer. Select transparency % from a drop down menu. Default view is **Opaque.**

Metadata
Displays the **LAYER INFORMATION** box, below the map area (scroll down if necessary).

View and select styles
The tool that displays information on the available styles, located below the map area.

Show the legend
Clicking on this icon shows the legend. Click on the legend to hide from view again.

Note: some legends, such as the **Country boundaries** layer legend (available by selecting the **Show the legend** icon) can be difficult to view due to similar background and foreground colours.

Remove layer

Removes the layer from the list of layers and the map viewer.

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3.4. Bottom toolbar icons

Add more layers by connecting to other Web Map Servers –

ADD A NEW LAYER box

This area contains a list of map servers with access to additional layers for adding to the map viewer.

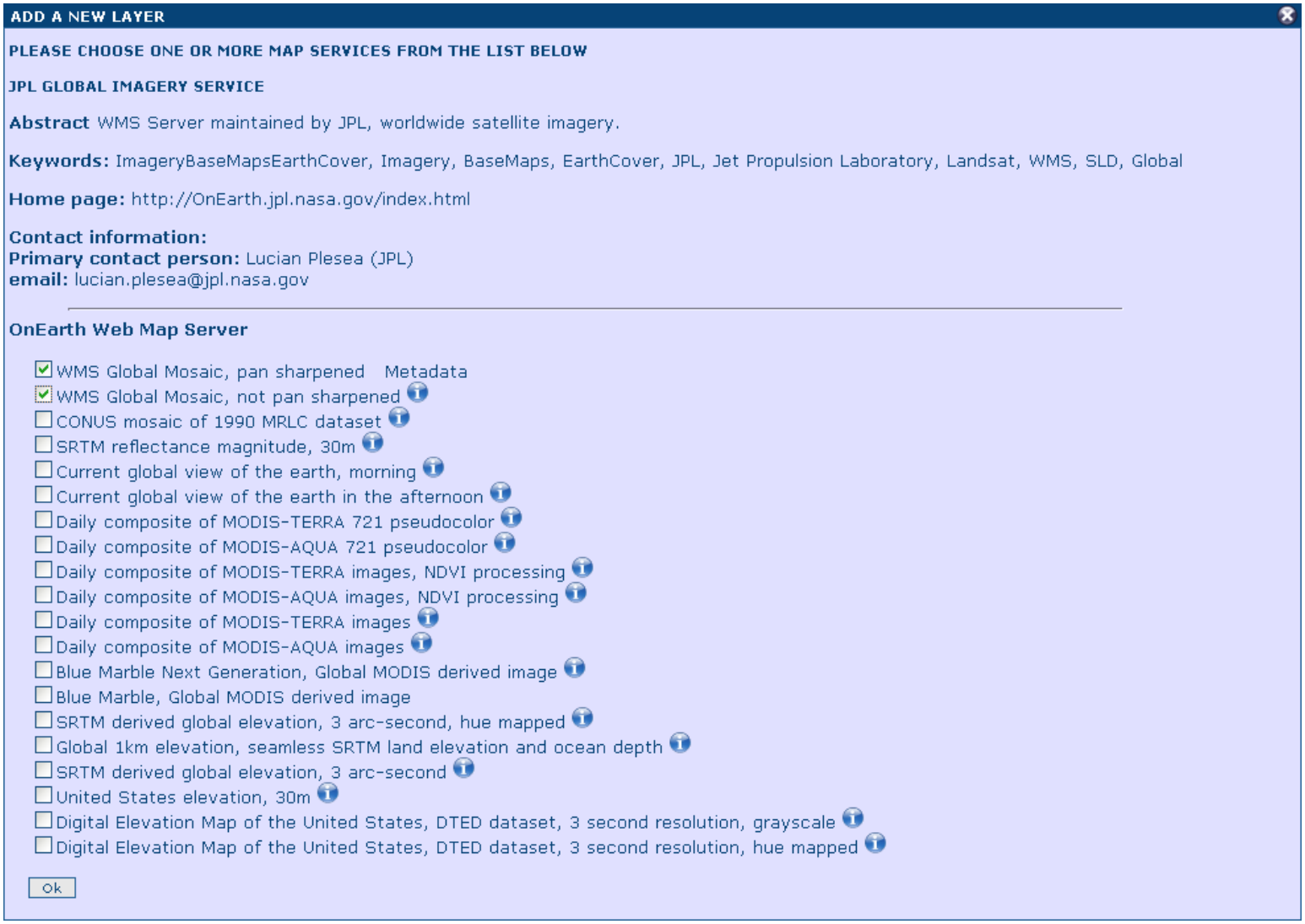
To add a new layer -

1. Select the button and choose a map server. Default map servers listed include:
    a. **Local GeoServer Web Mapping Server (WMS)**
        i. contains layers that display on the map by default
    b. **NASA JPL OneEarth Web Mapping Server (WMS)**
    c. **BlueNet WMS**

d. '- Other WMS server'

i. Add a link to an online Web Mapping Service here (for example: http://wms.jpl.nasa.gov/wms.cgi).

2. Press the Connect button once a map server has been chosen.
3. Tick the checkboxes next to the Web Mapping Services to pick the layer(s) for viewing.
   a. A **Metadata** link may be available for more details about the layer.
   b. The icon links to a short abstract about the layer.
4. Click the Ok button.


ADD A NEW LAYER
PLEASE CHOOSE ONE OR MORE MAP SERVICES FROM THE LIST BELOW
JPL GLOBAL IMAGERY SERVICE
Abstract WMS Server maintained by JPL, worldwide satellite imagery.
Keywords: ImageryBaseMapsEarthCover, Imagery, BaseMaps, EarthCover, JPL, Jet Propulsion Laboratory, Landsat, WMS, SLD, Global
Home page: http://OnEarth.jpl.nasa.gov/index.html
Contact information:
Primary contact person: Lucian Plesea (JPL)
email: lucian.plesea@jpl.nasa.gov
OnEarth Web Map Server
WMS Global Mosaic, pan sharpened Metadata
WMS Global Mosaic, not pan sharpened
CONUS mosaic of 1990 MRLC dataset
SRTM reflectance magnitude, 30m
Current global view of the earth, morning
Current global view of the earth in the afternoon
Daily composite of MODIS-TERRA 721 pseudocolor
Daily composite of MODIS-AQUA 721 pseudocolor
Daily composite of MODIS-TERRA images, NDVI processing
Daily composite of MODIS-AQUA images, NDVI processing
Daily composite of MODIS-TERRA images
Daily composite of MODIS-AQUA images
Blue Marble Next Generation, Global MODIS derived image
Blue Marble, Global MODIS derived image
SRTM derived global elevation, 3 arc-second, hue mapped
Global 1km elevation, seamless SRTM land elevation and ocean depth
SRTM derived global elevation, 3 arc-second
United States elevation, 30m
Digital Elevation Map of the United States, DTED dataset, 3 second resolution, grayscale
Digital Elevation Map of the United States, DTED dataset, 3 second resolution, hue mapped
Ok

You can double click a layer to bring the complete layer into view.

Export this map as a PDF
This feature allows you to save the map in PDF format.

1. Export the current map view by filling in the following details:
    a. **Title**
    Enter text in this field to display as a **Title** in the PDF.
    b. **Page Size**
    Select the preferred **Page Size** of the PDF to be generated. Options are **A4**, **Letter**, and **Legal.**
    c. **Orientation**
    Select the preferred **Orientation** of the PDF to be generated. Options are **Portrait** and **Landscape**.
    d. **Print Layerlist**
    Select **Print Layerlist** to display the Layerlist in the PDF.
    e. **Print details**
    Select **Print details** to display details in the PDF.
    f. **Print bounding box**
    Select **Print bounding box** to display the bounding box in the PDF.
    g. ~~**North arrow**~~
    Leave this option unselected - when selected, the North arrow option causes an error that stops the PDF from generating. The **North arrow** option will be available in future releases as an option that allows a **North Arrow** to be displayed in the PDF.
    h. **Scale**
    Selecting this option enables a **Scale** to display in the generated PDF.
    i. **Copyright info**
    Enter text in this field to enable **Copyright info**rmation to display within the PDF.
2. Select the **Generate PDF** button.

Markers will not be saved or displayed in the PDF.

Send current context

Upload a context

Download current context

Marker list

Lists the details of markers added to the map viewer. When there are multiple marker entries, the marker details will display in list form.

MARKER LIST
Port Phillip Bay, Victoria
Description of Port Phillip Bay, Victoria
Lat: -38.17771530151367 Lon: 144.87623596191406
Wilson's Promontory, Victoria
Description of Wilson's Promontory, Victoria
Lat: -39.04336166381836 Lon: 146.41372680664062
King Island, Tasmania
Description of King Island, Tasmania
Lat: -39.792728424072266 Lon: 143.99766540527344
Flinders Island, Tasmania
Description of Flinders Island, Tasmania
Lat: -39.99945068359375 Lon: 148.0158233642578

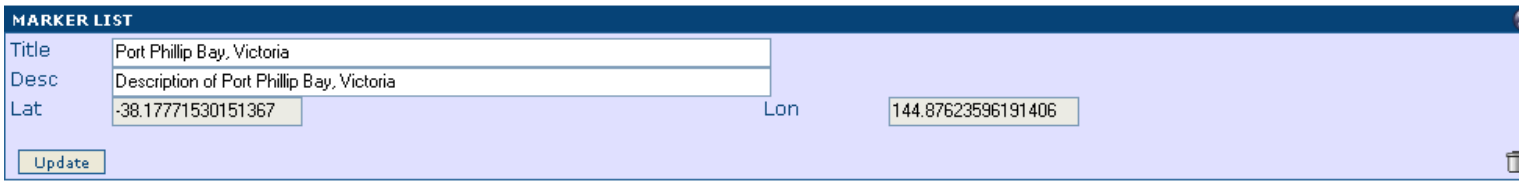
1. Select a marker to edit either on the map or from the **MARKER LIST**.

> If there is only one marker in the list, it will immediately be editable.

2. From here, edit the **Title** and **Description** fields, or copy the **Lat**itude and **Lon**gitude numbers. Click the Update button to save.

> **Lat**itude and **Lon**gitude fields can not be edited.

3. Delete the marker from here by clicking the icon on the bottom right-hand corner.



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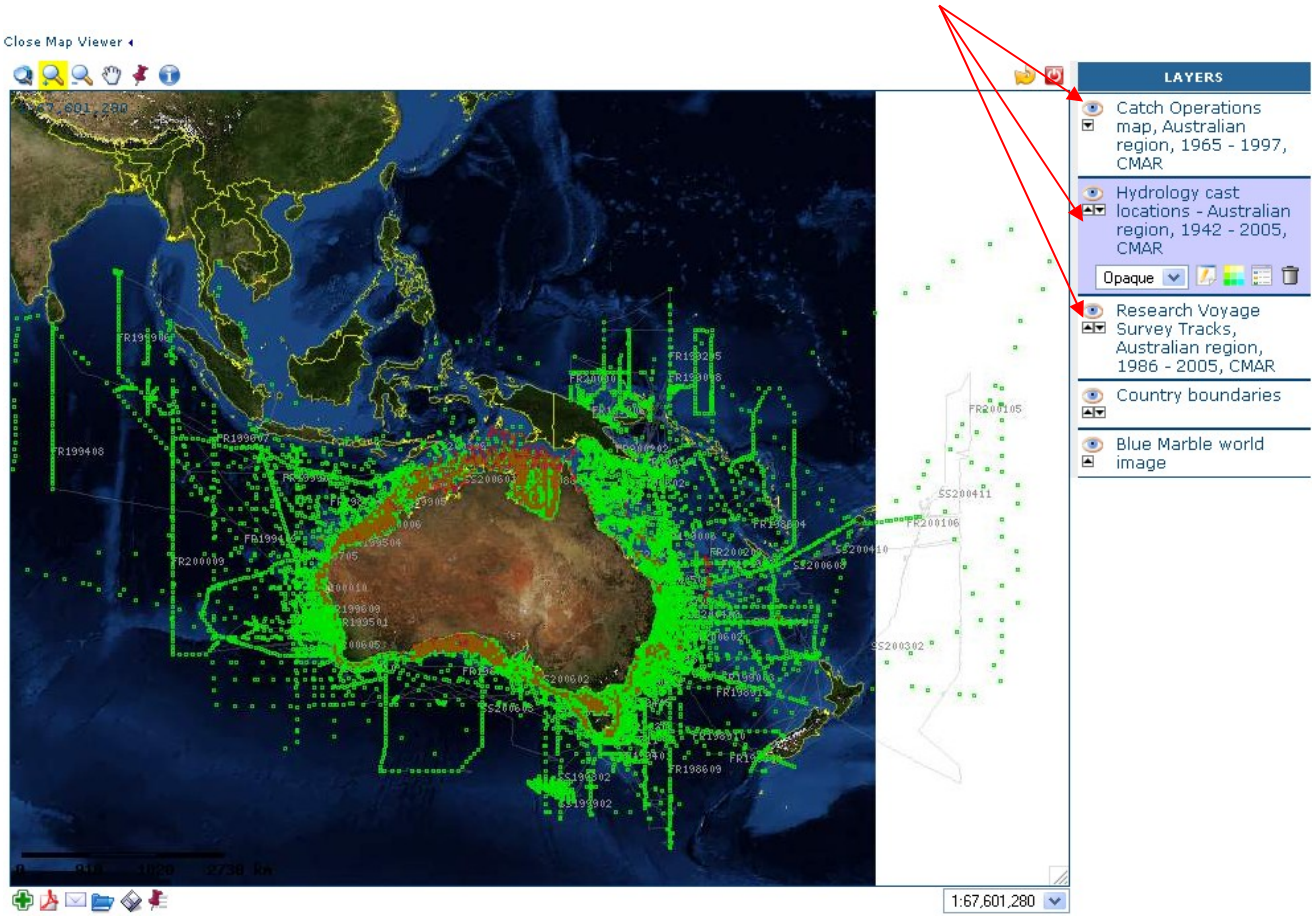
3.5. Adding interactive maps to the Map Viewer

1. Perform an **Advanced Search** (as detailed in How to Use Advanced Search:), with the **Interactive map** checkbox ticked (see Other Advanced Search Options).

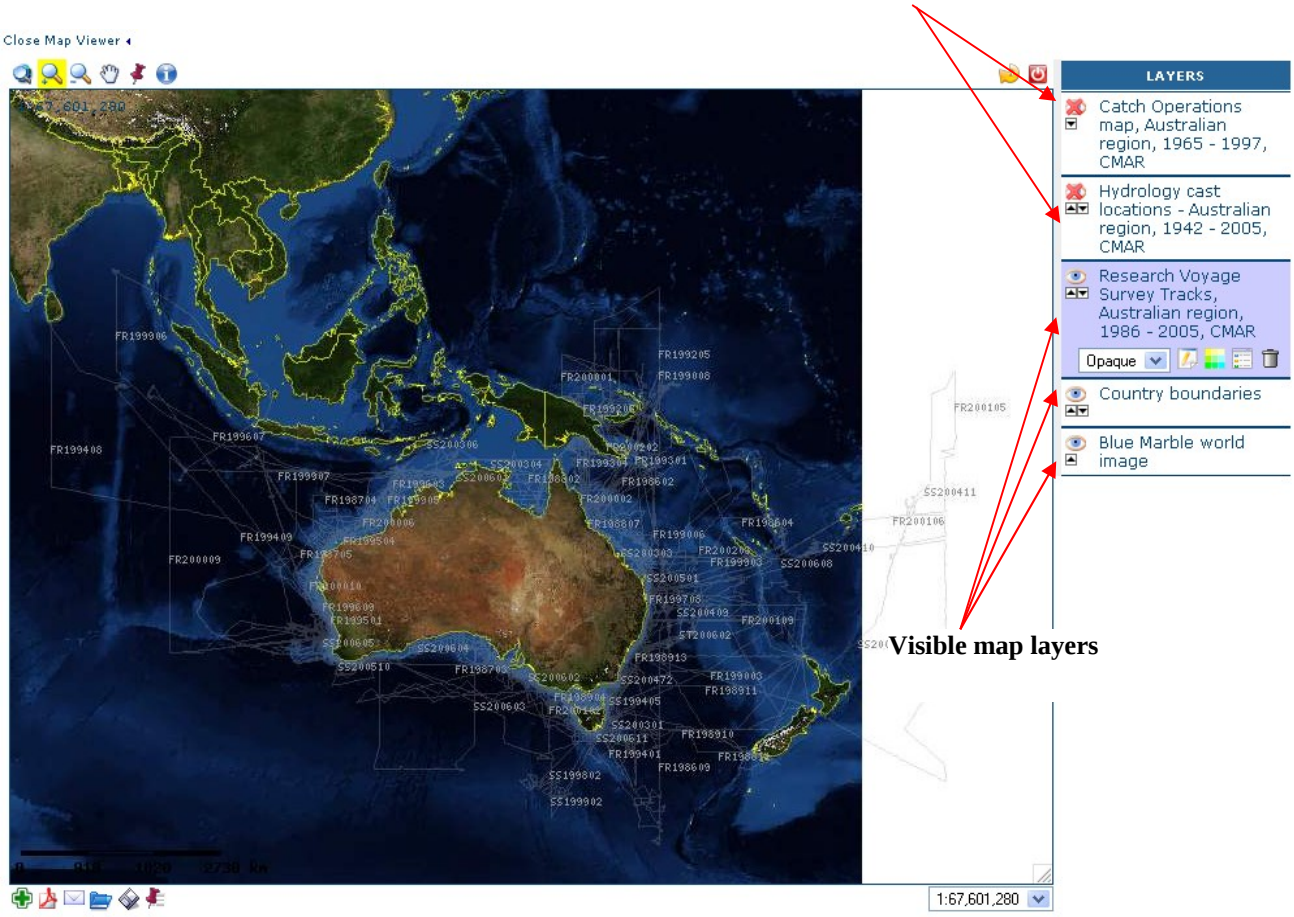
2. Choose a record from the search results and click the **Interactive Map** button.
3. A dialog box will pop up with a message saying the map chosen has been added to the search map and the **Map Viewer** tab. Select OK.
4. Select more interactive maps (Optional).
5. Navigate to the **Map Viewer** tab.
6. The interactive maps will be present in the map viewing area, and also listed in the **LAYERS** section.

Newly added map layers


Close Map Viewer
LAYERS
Catch Operations map, Australian region, 1965 - 1997, CMAR
Hydrology cast locations - Australian region, 1942 - 2005, CMAR
Opaque
Research Voyage Survey Tracks, Australian region, 1986 - 2005, CMAR
Country boundaries
Blue Marble world image
1:67,601,280

Suppressing map layers

The button hides or displays the selected layer on the map. By clicking on this button, the selected layer becomes hidden.


Suppressed map layers
Close Map Viewer
LAYERS
Catch Operations map, Australian region, 1965 - 1997, CMAR
Hydrology cast locations - Australian region, 1942 - 2005, CMAR
Research Voyage Survey Tracks, Australian region, 1986 - 2005, CMAR
Opaque
Country boundaries
Blue Marble world image
Visible map layers
1:67,601,280

Closing and opening the map viewer using the **Close Map Viewer/Open Map Viewer** link will not remove recently changed settings. Ensure that you **Reset** the **Map Viewer** and/or the search pages before performing a new search.

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Close

The cross icon closes the information box below the map viewer. An information box only appears when a tool from the bottom toolbar or the Layers area has been selected.

Firefox

Firefox Users: often after clicking the '**Close Map Viewer**' link, clicking '**Open Map Viewer**' fails to open the map viewer. Refresh the page (F5, or alternately Ctrl+R) to re-display the map viewer.

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4. VIEWING AND DOWNLOADING

4.1. Search Results

Once the search is complete the output will be a list of metadata results matching the search criteria. Each metadata record listed in the output will detail the **Title**, a section of the **Abstract**, **Keywords**, Extent (for searches in a geographical constraint), **Schema** and if applicable a thumbnail displaying a relevant picture or map of the associated location. Metadata records in some instances may also contain an **Interactive Map**, a link to **View in Google Earth**, or information regarding data attached to the record.

4.1.1. Remote Search Results:

In addition to the common elements of the search results area, there are elements of the results that are specific to the **Remote Search** tab.

The server title, displayed in red text, is the server the record originated from.

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4.2. Output Display

The metadata records within the output list can be viewed and sorted in a number of ways.

4.2.1. Select Options

Aggregate Results matching search criteria : 1-10/554 (page 1/56) 0 selected Sort by Relevance
Select : all, none
Actions on selected metadata

- **all** – selects all metadata records listed in the output.
- **none** – removes all selections of metadata records.
- **Actions on selected metadata** – at least one metadata record must be selected to use this option. The available options will vary in relation to the ownership privilege level of the record and user security.

Actions on selected metadata
The following are the available selections for a non-registered user;

- **Display selected only**
- **PDF** - Save search results as PDF

Display selected only and **PDF** do not display the selected records when a logged-in user has chosen **Templates** from the **Kind** drop-down list as part of their **Advanced Search**.

The following, in addition to the above, are available for registered users with sufficient privileges;

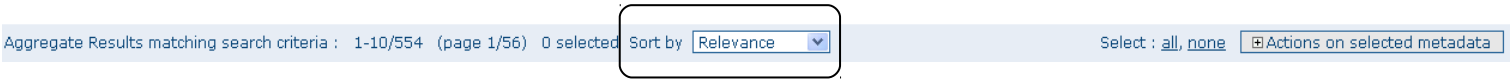
- **Delete** (see section **5.10 Delete Metadata Record**)
- **Update categories** (see section **5.7 Assigning Categories**)

The **Categories** feature allows users with sufficient privileges to assign categories to the associated record. Check the box next to each category required and press the **Submit** button.

- **Update privileges** (see section **5.6 Assign/Alter Access Privileges**)

The **Privileges** feature displays the privileges associated with a record, and for sufficiently privileged users, will be editable. It will show which **Groups** a record is **Publish**ed to, whether members of that group have **Editing** privileges for that record, whether the **Download**able data and **Interactive Map** is published to that group, whether the record should be **Featured** on the home page, and **Notify** signifies whether the owner of the associated group is notified whenever the record is accessed. Check the box next to each privilege required and press the **Submit** button.

4.2.2. Sort Output List


Aggregate Results matching search criteria : 1-10/554 (page 1/56) 0 selected
Sort by
Relevance
Select : all, none
Actions on selected metadata

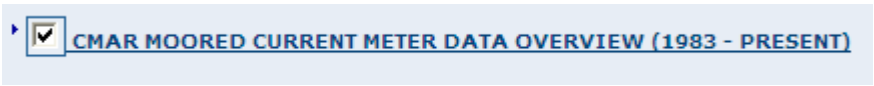
If the search criteria have returned multiple metadata records it is possible to sort the output results. The sort options are –

- **Relevance**
- **Rating**
- **Popularity** – displayed in the order of the number of times viewed
- **Change Date** – displayed in order of metadata with the most recent revision date (the revision date is updated automatically during the edit process)

4.2.3. Refine Output List

The output list can be refined by altering the search criteria, refer to Tips for Searching. The number of metadata records shown in the output list can also be reduced by performing the following steps –

1. Select the record(s) by placing a ‘tick’ in the box preceding the **Title**.



2. Expand the available options from the **Actions on selected metadata** field.
3. Select **Display selected only.**

Only the metadata records selected will be listed in the output.

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4.3. View Results

The metadata profile is organised into a collection of elements and fields (sections or sub-sets of the metadata), the elements and fields available for view will be dependant on the view option selected. For further information about each group see the section view results **By Group**.

4.3.1. View Record

Once the metadata record is identified,

1. Select the record **Title** within the output list to open the metadata.

Once the metadata record is open, there are three viewing options available. To switch view options, select the option in the left hand column of the page. The view in **bold** is the default view displayed.

The three view options –

- **By Profile**
- By Group
- **XML view**

4.3.2. By Profile

The **By Profile** option formats the metadata record to a particular view of a metadata standard/profile.

Current options for the Marine Community Profile are for -

- **MCP Minimum**: Contains the Data Identification and Metadata Info sections (groups) of the Marine Community Profile.
- **MCP Core**: The core metadata components of ISO19115 and,
- **MCP All**: An expanded version of the MCP v1.3 that is also compliant with ISO 19139.

This is for users used to working with or reading a simpler subset of the metadata standard. Choosing **MCP Core** allows detailed content to be suppressed that may not be of interest to the user.

4.3.3. By Group

Viewing **By Group** selects and displays a sub-set or section of the metadata record.

Note - a blank page will be presented if the metadata record is not complete for that particular section.

Metadata -
The metadata section contains information about the metadata record itself, including –

- Unique **File Identifier (UUID)**,
- **Language** and **Character Set**,
- **Hierarchy Level**
- **Date Stamp** of when the metadata record was created,
- **Metadata Standard Name** and **Version**,
- **Contact** details for record author and resource contact.
- latest **Revision Date**

For further information regarding elements and fields within the group **Metadata** see section **5.2.2.1 Metadata**.

Identification (Data Identification) -
The identification info contains basic information about the resource, including –

- **Citation of the resource**,
- **Abstract**,
- **Credit to contributors**,
- **Status of the resource**,

- **Maintenance details** (any maintenance details are relating to the resource, metadata maintenance details are listed within the Maintenance group),
- **Resource format**,
- **Descriptive keywords**,
- **Copyright** (and other) constraints on the resource/data. Constraints on the metadata are listed within the Constraints group,
- **Aggregation information,**
- **Language** and **character set**,
- **Topic Category** of the resource,
- **Temporal** and **spatial extent**,
- **Sampling frequency,**
- **Data parameters.**

The extent element of data identification is conditional, either the bounding box or the description subclass of extent's geographic element role shall be included if the resource is a dataset. Both bounding box and description can be used.

For further information regarding elements and fields within the group **Identification** see section **5.2.2.2 Identification**.

Maintenance -
The maintenance section contains information about the frequency and scope of planned updates for the metadata. The maintenance information entity is optional and contains one mandatory element.

Metadata Re-use –

In MEST versions up to 1.2.0, **Metadata Re-use** was previously labeled **Constraints**.

The constraint information contains the limitations on the access and re-use of the metadata record. The constraints entity is optional and may be specified as legal constraints, security constraints, Creative Commons, and/or Data Commons.

Spat. Info. (Spatial Information) -
The spatial information section carries content about the geographic, vertical and temporal extent covered by the resource. The spatial extent is represented by the bounding box. The temporal extent is described by the starting and ending date of the period (Spatial/GIS data only).

Ref. system (Reference System) -

The reference system contains information about the spatial and temporal reference system used to generate spatial data (Spatial/GIS data only).

Distribution -
The distribution information contains the distributor of, and options for obtaining, a resource. The distribution element allows for on-line access to resources by using a URL address.

The distribution information is an aggregate of the –

- format for distribution,
- identification of the distributor, and
- digital distribution (i.e. **Online** resource in the Transfer Options section).

In some cases the resource is a data file or related file, which can be downloaded directly from the MEST via a link in this section.

Users may need to apply for a username and password to download some data (see Data Access **- Registration**).

For further information regarding elements and fields within the group **Distribution** see section **5.2.2.7 Distribution**.

Data quality -
The data quality information helps the user decide on the quality of the resource described, e.g. sampling protocols, calibration information, equipment model information, degree of accuracy, details of any QA/QC procedures.

A lineage statement (general explanation of the production process used for creating the data) would be created for most metadata records within the data quality section. However, more advanced users may enter a substantial amount of detail in this area.

For further information regarding elements and fields within the group **Data quality** see section **5.2.2.8 Data quality**.

App. schema – (Appl… schema)
Information about the conceptual schema of the resource, this field is only used when the resource is a dataset.

IMAS data users: App. schema is currently not utilised by IMAS.

Catalog –
Information about the catalogue of rules defined for the portrayal of the resource.

IMAS data users: Catalog is currently not utilised by IMAS.

Content Info –

Information about the feature catalogue. Describes the coverage and image data characteristics of the resource.

IMAS data users: Content Info is currently not utilised by IMAS.

Ext. Info (Metadata Extension Information) –

IMAS data users: Ext. Info is currently not utilised by IMAS.

The metadata extension information is the same for all records created using the same metadata standard/profile. The section contains information on how the metadata standard used (for most MEST records this is the Marine Community Profile) relates to its parent standard, ISO19115. This information is required to ensure interoperability with other metadata profiles also based on ISO19115.

4.3.4. XML view

This **XML view** is for those users familiar with the encoding language, XML (E**x**tensible **M**arkup **L**anguage). The **XML view** shows the entire content of the metadata in the original hierarchical structure. The element name and value can be distinguished by the colour of the text. XML can be used to import records into the MEST.

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4.4. Download Data Set(s)

The availability of data to download will be dependant on –

- Data files being attached to the record
- The privileges that have been assigned to the dataset

Generally if data is available for the resource a **Data for Download** button will be visible within the search output or listed in the record in the **Distribution** element, for registered users. For non-registered users the following message will display '**Data attached but you cannot download unless you register**'.

There are two available ways to download files attached to the record:

- From the search output, or
- Within the metadata record, from the **Distribution** group

4.4.1. Search Output

1. Find the record from one of the SEARCH options.
2. From the search output select the **Data for Download** button.

Go to **4.4.2 below**

4.4.2. Metadata Record

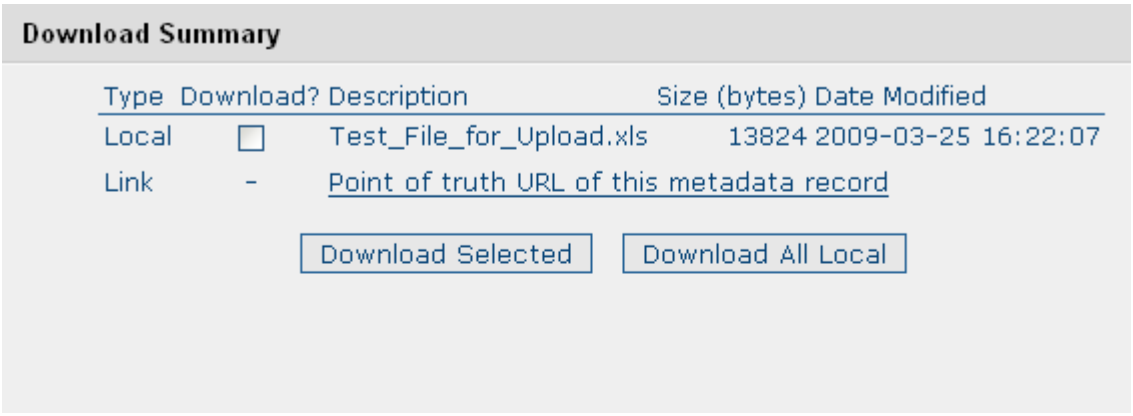
3. Find the record from one of the SEARCH options.
4. Open the record.
5. Select **Distribution** from the **By Group** list on the right hand side of the screen.
6. Select **Show File Download Summary**.

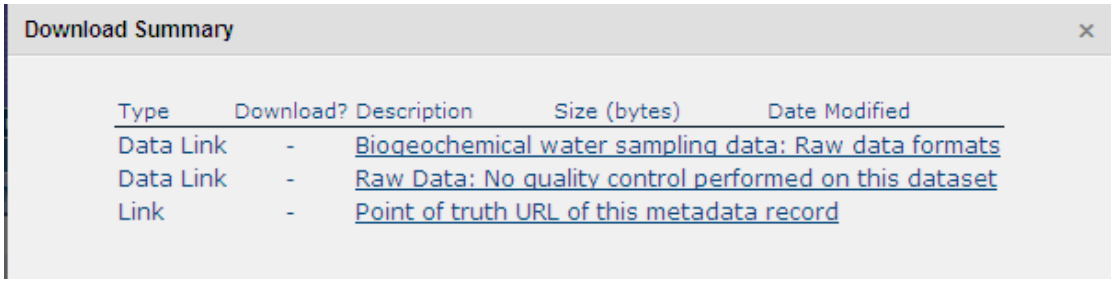
Go to **4.4.2 below**

   a. If **Show File Download Summary** button is not available, select the link next to **Data for Download**.

Go to **4.4.2 below**

7. A **Download Summary** screen similar to one of the following is displayed:


Download Summary
Type Download? Description Size (bytes) Date Modified
Local Test_File_for_Upload.xls 13824 2009-03-25 16:22:07
Link - Point of truth URL of this metadata record
Download Selected
Download All Local


Download Summary
Type Download? Description Size (bytes) Date Modified
Data Link - Biogeochemical water sampling data: Raw data formats
Data Link - Raw Data: No quality control performed on this dataset
Link - Point of truth URL of this metadata record

Point of Truth URL

When a record has been harvested, the **Point of Truth URL** exists as a link back to the original location of the metadata record. This is important for comparing license information to make sure nothing has been changed.

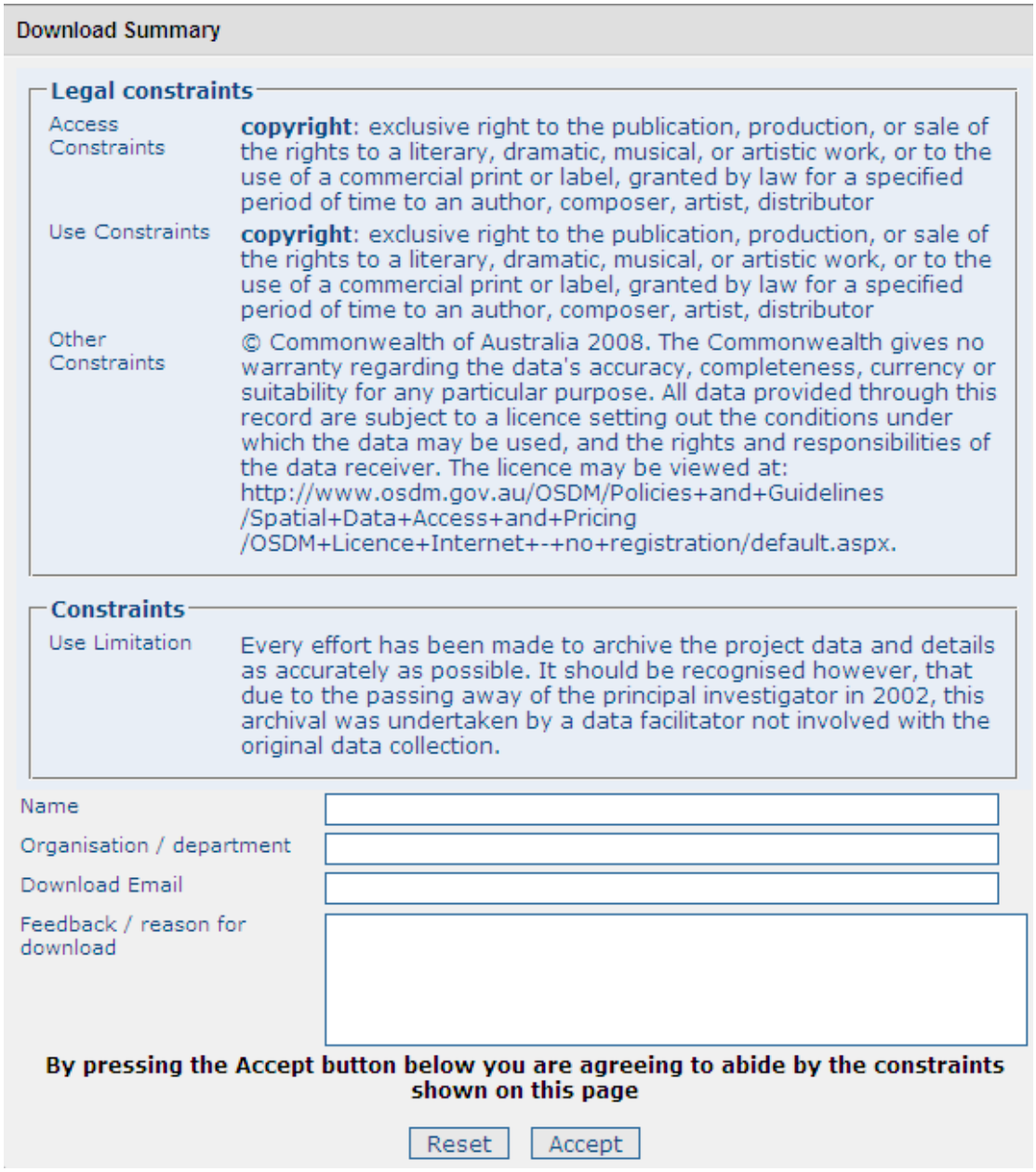
a. If the data you wish to select is type **Data Link**, click on the link and you will be taken to an external website to download files.

 Finished

b. If the data you wish to download is type **Local**, continue following the instructions.

Go to **4.4.2 below**

8. Check the file(s) required and select the **Download Selected** button OR select the **Download All Local** button. The following **Download Summary** screen is displayed:


Download Summary
Legal constraints
Access Constraints
copyright: exclusive right to the publication, production, or sale of the rights to a literary, dramatic, musical, or artistic work, or to the use of a commercial print or label, granted by law for a specified period of time to an author, composer, artist, distributor
Use Constraints
copyright: exclusive right to the publication, production, or sale of the rights to a literary, dramatic, musical, or artistic work, or to the use of a commercial print or label, granted by law for a specified period of time to an author, composer, artist, distributor
Other Constraints
© Commonwealth of Australia 2008. The Commonwealth gives no warranty regarding the data's accuracy, completeness, currency or suitability for any particular purpose. All data provided through this record are subject to a licence setting out the conditions under which the data may be used, and the rights and responsibilities of the data receiver. The licence may be viewed at: http://www.osdm.gov.au/OSDM/Policies+and+Guidelines /Spatial+Data+Access+and+Pricing /OSDM+Licence+Internet+-+no+registration/default.aspx.
Constraints
Use Limitation
Every effort has been made to archive the project data and details as accurately as possible. It should be recognised however, that due to the passing away of the principal investigator in 2002, this archival was undertaken by a data facilitator not involved with the original data collection.
Name
Organisation / department
Download Email
Feedback / reason for download
By pressing the Accept button below you are agreeing to abide by the constraints shown on this page
Reset
Accept

The second **Download Summary** screen details all constraints attached to the dataset. Acceptance of this screen indicates agreement to abide by the listed constraints and license.

9. Review the constraints and any attached license information by selecting the link provided. If you agree with the license, you may proceed by selecting the **Accept** button. The file(s) with file types will be displayed.
10. Select the **Download** button.

It is possible to directly open a zip containing the files or to save the files.

11. Which browser are you using?
    a. Internet Explorer

Go to **4.4.2 below**

    b. Firefox

Go to **4.4.2 below**

Internet Explorer users:

12. Select **Open** or **Save**.

If choosing to save the file(s) it will be possible to navigate to the required location. Select **Save**, and once the file(s) have completed downloading; select **Close**.

13. Select **Close window**.

Firefox users:

14. Choose between **Open with** and **Save to Disc**, and then select **OK**.
15. Select **Close window**.

License Details

License details must be read prior to accepting to download files.

To review the license details at a future date, navigate to the location of the downloaded zip file (from steps 10 – 15) and open the file. License details will be included within the zip file.

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5. RECORD MANAGEMENT

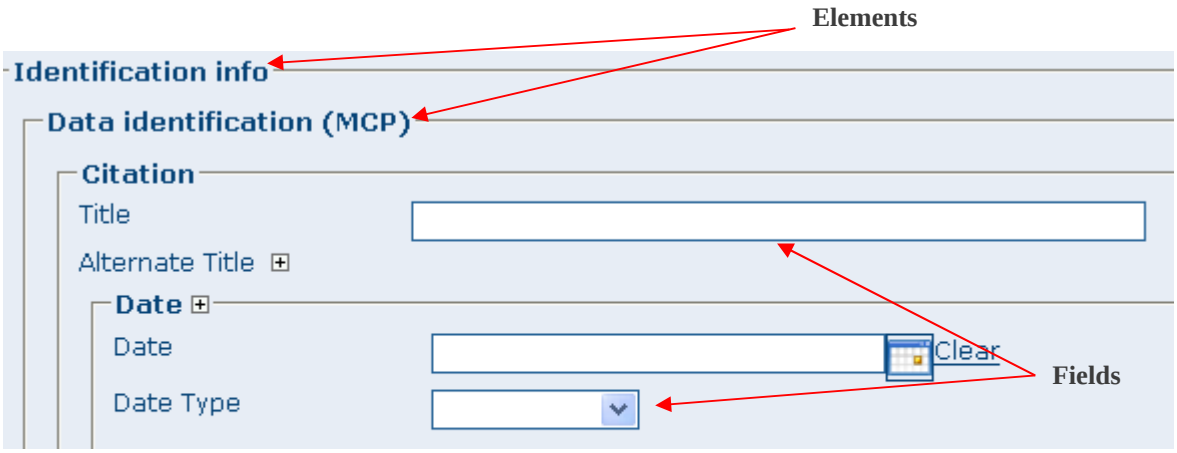
This section describes the basic information of a metadata record including the layout, elements and fields, field obligations and information, and guides through the process of adding and creating new records.

5.1. Metadata Creation Information

5.1.1. Basic Layout of a Metadata Record

The metadata record is made up of **elements** (field-blocks) and **fields**.

Elements are headers for particular sections of the record, and **fields** are used to enter the information. **Fields** are either free text or drop-down lists. Free text means that any text can be entered into that field.



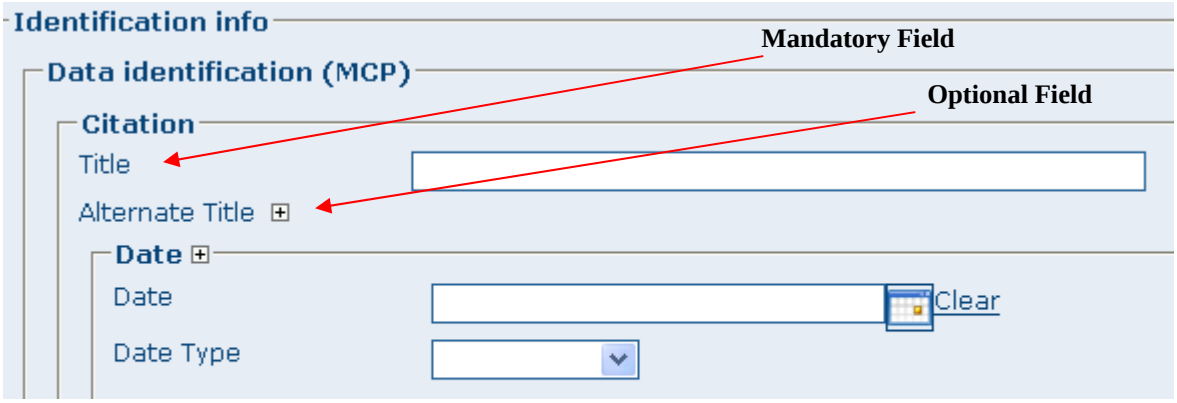
5.1.2. Field Obligations

Most fields within the Marine Community Profile are entirely **optional**; however some fields are **mandatory** and others **conditional**. Mandatory fields must be completed, whereas the optional fields can be provided but are not essential.

Conditional fields are optional fields that become mandatory under certain field entry conditions. The conditional fields are not marked. A conditional requirement indicates that the presence of a specified data element is dependant on the value or presence of other data elements in the same section.

The **mandatory** fields do not have a **[X]** symbol next to the field name. A mandatory field contained within an optional element (i.e. a field block that can be deleted) is only mandatory if the field block is used. Note that a mandatory field contained within an optional field block (e.g. a field block that can be deleted) is only mandatory IF you elect to use that field block.

The obligations of the fields will need to be observed in order to complete a valid metadata record.



5.1.3. Additional Elements or Fields

It is possible, for some elements and fields, to add multiple entries of the same kind by clicking the **[+]** symbol next to the element or field.

Before expanding some elements and fields, a selection must be made from a drop-down menu, to indicate the type of expansion required. In the following example an option must be selected from the drop-down prior to selecting the **[+]** symbol. The expanded result will be dependant on the initial selection.

Clicking the **[+]** symbol can –

- Expand a suppressed field
- Create an additional element or field
- Expand a field block

Drop-down menus associated with expanding fields do not have a different appearance to other fields with drop-down menus. Care should be taken to ensure the field is expanded and the data entered. If uncertain, select the **[+]**, if the result is a new occurrence of one field then it is a simple drop-down menu.

5.1.4. Suppressing Elements or Fields

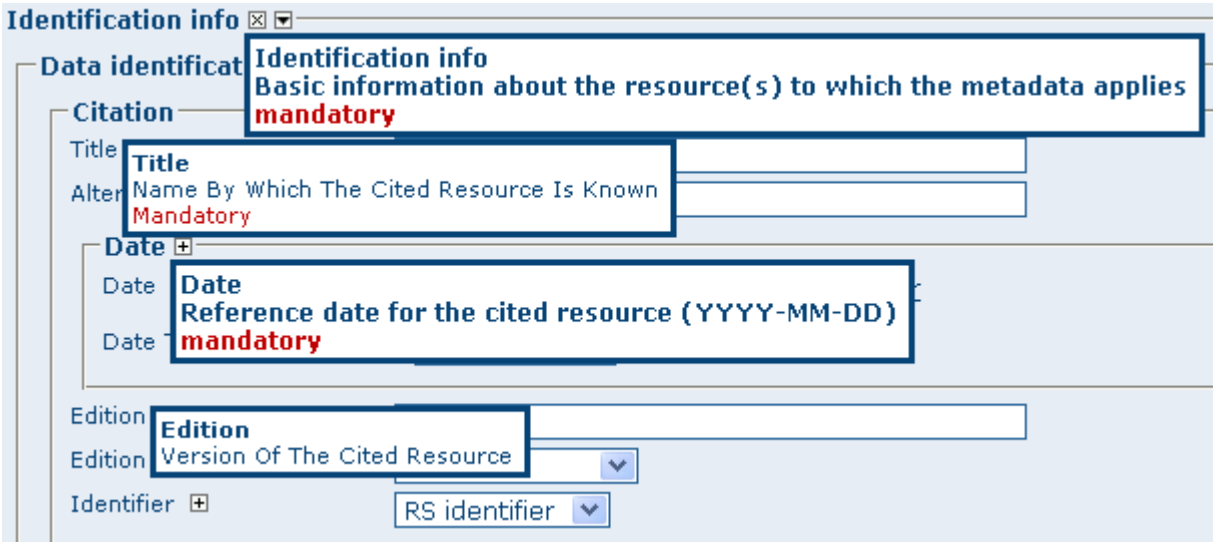
Elements or fields that are not mandatory or conditional can be suppressed from view by clicking on the **[X]** symbol next to the element or field.

Clicking the **[X]** symbol, during creation or editing, on an element or field with content will remove the content from the field(s) prior to suppressing it. Please note, that suppressing an element or field that is mandatory will affect the validation process.

5.1.5. Field Information

The standard definition for each field can be read by clicking on the field name. If a field is mandatory or conditional, this will be noted within the information box. Details of the obligations associated with the field are printed in red.

To remove the information box, single click on the field name. Field Information is explained in more detail below (see section **5.2.2 Creation View – By Group**).



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5.1.6. Metadata Creation Tips

Saving a metadata record

You do not need to complete a metadata record in one sitting. By selecting the 'Save and Close' button, the record is saved but is only visible to yourself if you are the only member of your user-group. If you share your user-group with other people they will also be able to see your record.

It is recommended you put the string [**DRAFT**] at the beginning of the title, while you are still working on the record to make it easily identifiable. When you would like to continue editing your record, simply conduct a search for the record and select the 'Edit' button.

5.2. Create Metadata Record

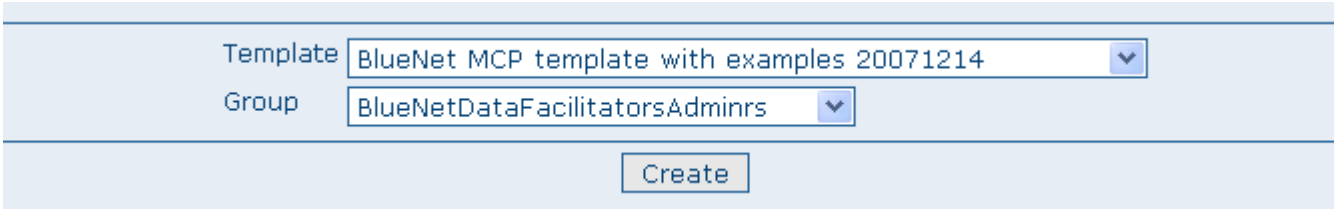
The following steps through the process of adding a new metadata record using the template system; with the Marine Community Profile (MCP) Group view of metadata (under view **By Group**).

The following process will include the selection of the template and group, adding thumbnails and images, uploading data, record validation and setting the access privileges to the metadata and data.

5.2.1. Metadata Record – Template and Group Selection

To create a metadata record –

7. Enter **Username** and **Password** details and select **Login**.
8. Select **New metadata** from the MEST home page. The following screen is displayed:



9. Select the appropriate **Template** from the drop-down options.

For IMAS users select either: **IMAS Template (+ Vertical Extent relative to Mean Sea Level Depth CRS EPSG::5715),** if the record will contain depth information,

OR **IMAS Template (with no vertical extent information),** when the record will contain no depth information. If the first template is selected, and then no depth information is required to be added to the record, the Vertical Element field can just be closed. All required elements to complete the record have been expanded out, and where possible, content has been suggested.

IMAS preferred fields (includes all mandatory fields), in order of appearance in the record:
Title, date and type, Cited responsible parties, Abstract, Credit, Status of data, Point of Contact details, Resource maintenance, Resource format, Descriptive keywords, Resource constraints, Aggregation information (if required), Geographic element, Temporal Element: start/end date, Vertical Element, Supplemental information, Sampling frequency, Data Parameters and Units, Data Quality statement., Distribution format, Metadata contact (in addition to IMAS data manager, same as POC).

10. Select the appropriate **Group** from the drop-down options.

Under the **Group** drop-down menu choose the appropriate working group that will "own" this record; (Most people will only be a member of a single user-group, so will only see one group listed.)

11. Select **Create**.

5.2.2. Creation View – By Group

Creation view for a metadata record can either be **By Profile** or **By Group.** The following instructions demonstrate the creation of a metadata record **By Group**.

If there is a requirement to add or remove metadata elements the view can be switched to **MCP Minimum, MCP Core** or **MCP All,** at any stage during creation or editing.

5.2.2.1. Metadata

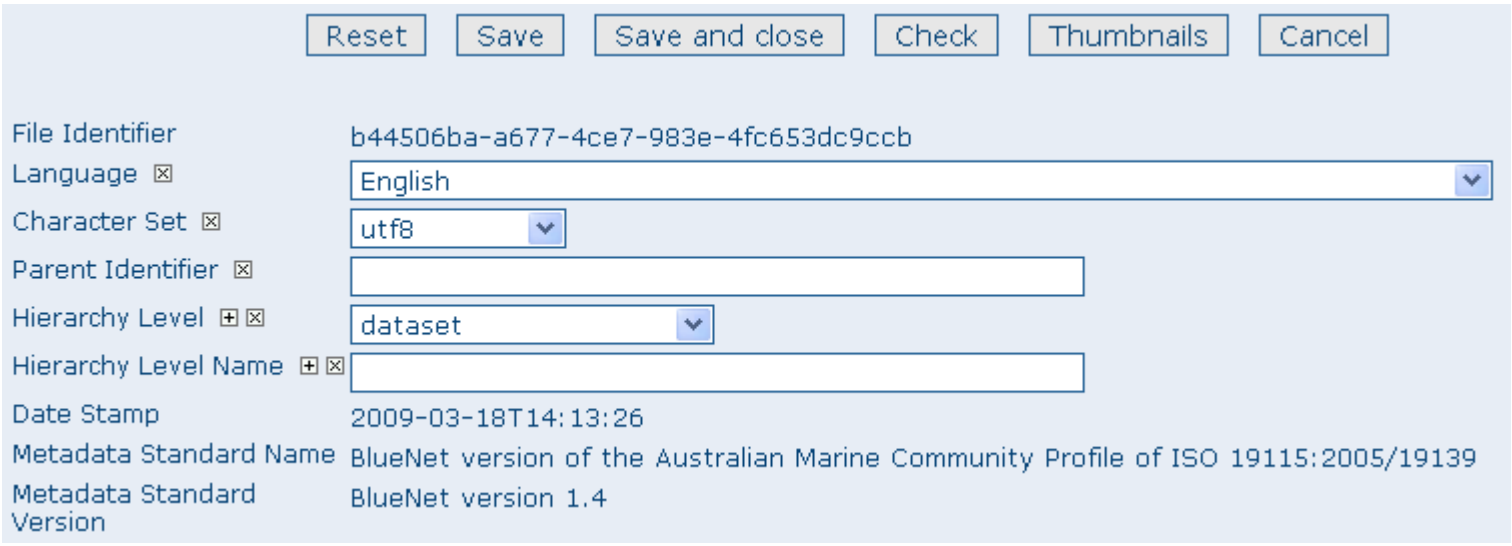
Information about the metadata record itself.

12. Select **Metadata** from the **By Group** list on the left hand side of the screen. A new metadata form based on the selected template will be displayed to complete. Complete the relevant elements and fields within **Metadata**.

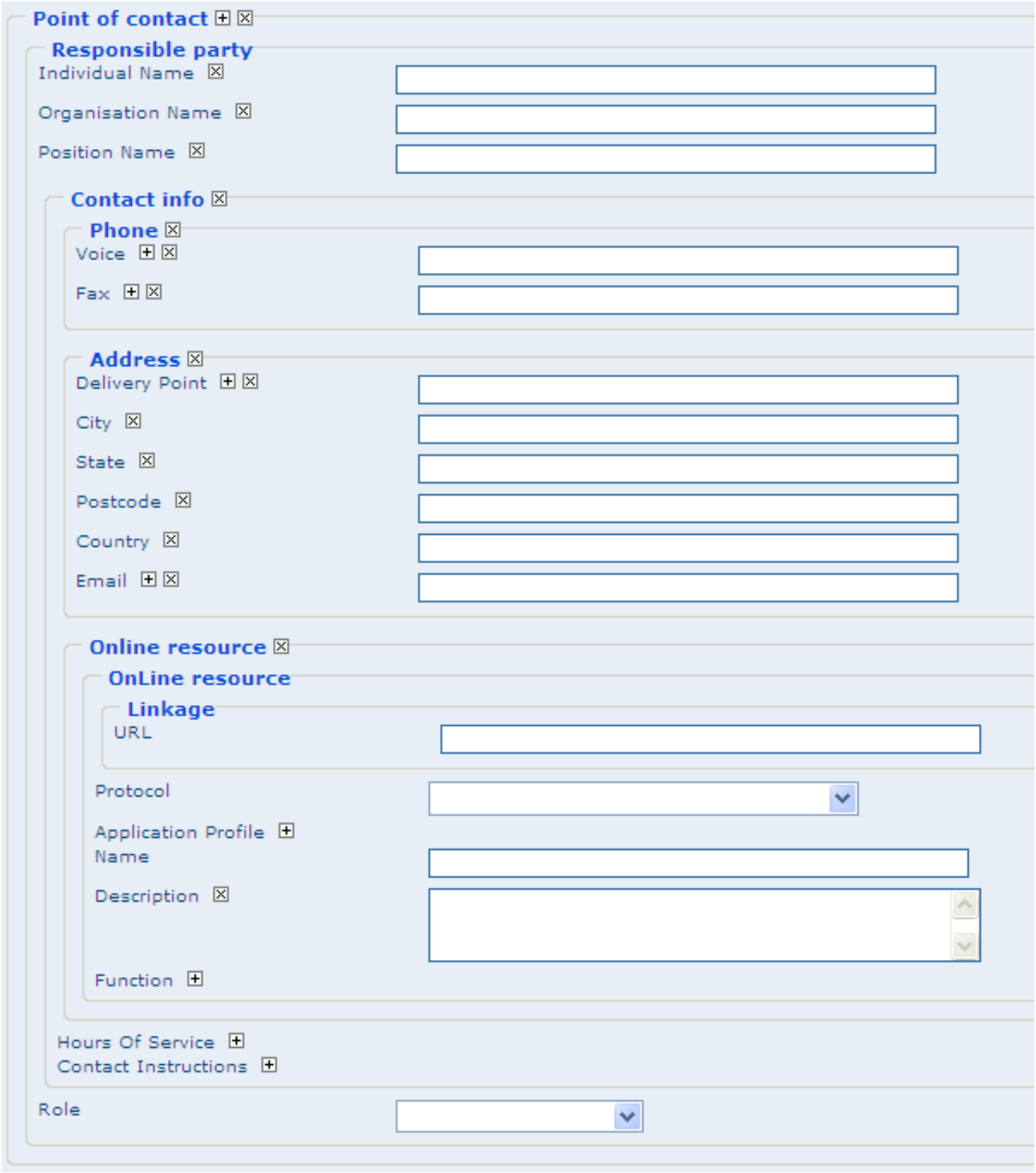
File Identifier	**M**	**The unique identifier for the metadata record.**

		The metadata identification number permanently identifies a metadata file. The identifier of a metadata file should never change while the associated dataset is deemed to be the same. This includes over time, when the dataset is transferred between custodian or when the metadata record is shared between metadata applications. To ensure the file identifier is universally unique, a Universal Unique Identifier (UUID) is used to generate the identifier. *Example* – f81d4fae-7dec-11d0-a765-00a0c91e6bf6.
Language	**C**	**The language used for documenting the metadata.** Format – Values are selected from a controlled codelist. The default is English. Obligation – Must exist if not defined by the end encoding.
Character Set	**C**	**Name of character coding standard used for the metadata set.** **DO NOT** change this data. Default value = 'utf8'.
Parent Identifier	**C**	**The file identifier to which this metadata record is a subset (child).** Obligation - Must exist if there is an associated parent metadata record. *Example* – f81d4fae-7dec-11d0-a765-00a0c91e6bf6.
Hierarchy Level	**C**	**The scope of the metadata.** Enter the class of information to which the referencing entity applies. The default is dataset. Format – Values are selected from a controlled codelist. Obligation – Must exist if parent element exists and hierarchy level not equal to dataset.
Hierarchy Level Name	**O**	**The name of the hierarchy levels of the metadata where the metadata is a subset of a previous described metadata.** *Example* – Coastline (feature type).
Date Stamp	**M**	**The date the metadata was created.** This element is automatically generated by the MEST.

Metadata Standard Name		**Name of the metadata standard, including the profile used.** This element is automatically generated by the MEST.
Metadata Standard Version		**Version of the metadata standard used.** This element is automatically generated by the MEST.

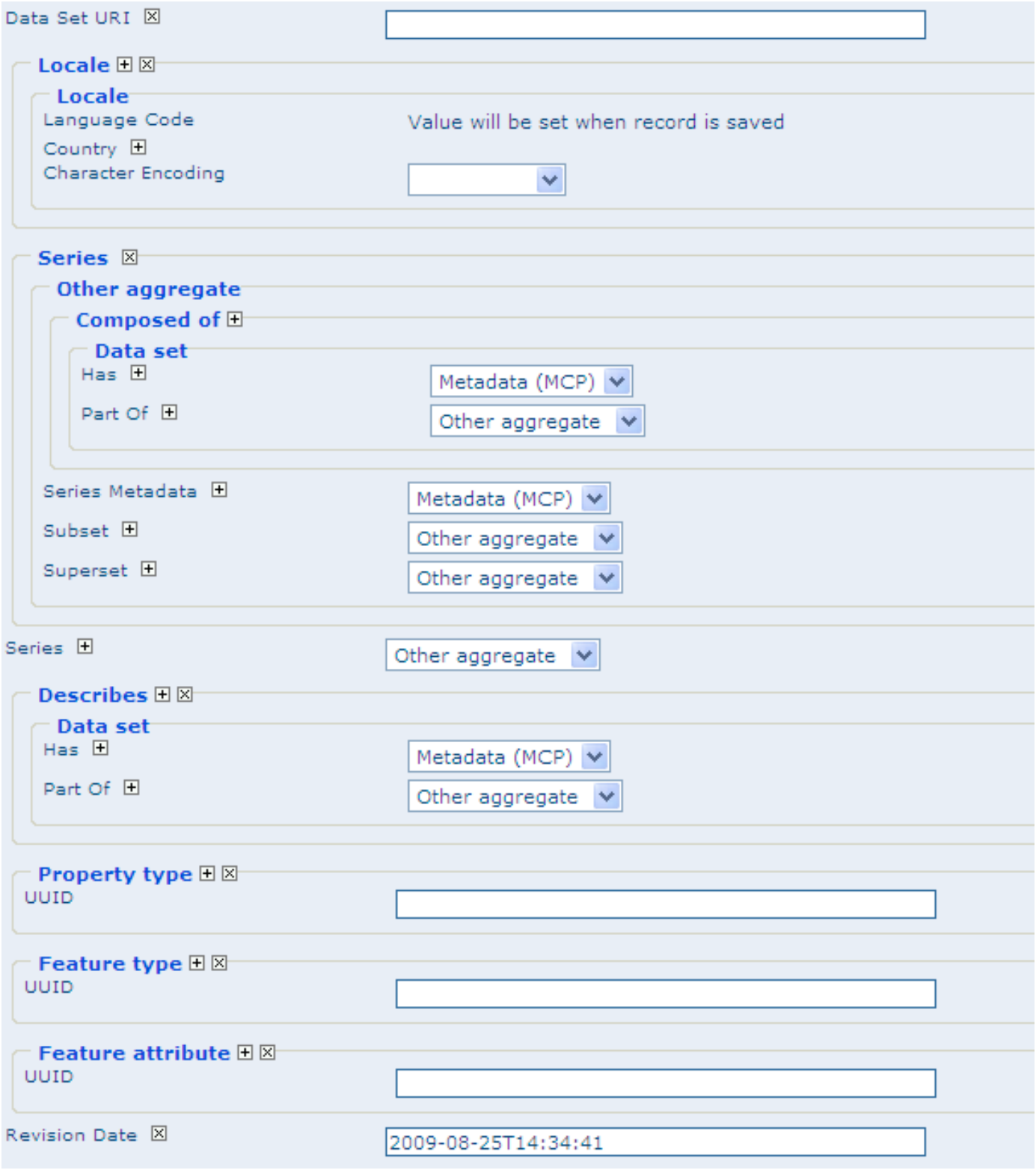


Contact – Party responsible for the metadata record.		
Responsible party	**M**	Identification of, and means of communication with, person(s) and/or organisation(s) associated with the metadata record. Format - List current contact information. *It may not be necessary to fill out all field blocks within this element. Refer to Appendix 1 for Contact information summary. (Appendix 1: Contact details) See Point of contact for a list of definitions describing all fields within contact details. (Point of contact).*



Data Set URI	**O**	**Uniform Resource Identifier (URI) of the dataset to which the metadata applies.** *Example –*

		• ftp://ftp.is.co.za/rfc/rfc/1808.txt This field is currently not utilised by IMAS.
Locale		This field is currently not utilised by IMAS.
Series		This field is currently not utilised by IMAS.
Describes		This field is currently not utilised by IMAS.
Property type		This field is currently not utilised by IMAS.
Feature type		This field is currently not utilised by IMAS.
Feature attribute		This field is currently not utilised by IMAS.
Revision Date		**Date that the metadata record was last revised.** **DO NOT** change this data. The revision date will automatically be updated once editing occurs on the record. The time zone for the dates are determined by the time zone of the MEST server.



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5.2.2.2. Identification

Basic information about the resource to which the metadata applies.

13. Select **Identification** from the **By Group** list on the left hand side of the screen. A new metadata form based on the selected template will be displayed to complete. Complete the relevant elements and fields within **Identification**.

Identification info		
Title	**M**	**The name of the resource**. A default of the template name will appear in the **Title** field. The **Title** should be a clear and concise description of the content of the resource. Format – No set format is required, however, the **Title** should be descriptive enough so that the user can determine the general content of the dataset. In order to make the **Title** descriptive, important elements about the data can be included, i.e., parameters measured, geographic location, instrument, investigator, project, temporal coverage, and/or taxonomic names. *Examples –* • Foraging behaviour in the sooty shearwater (Puffinus griseus) on Rottnest Island, Western Australia; • Wind statistics at Governor Head Meteorological Station, Jervis Bay over a one year period (Nov 1988 - Oct 1989); • Quantifying the isotopic composition of oxygen and carbon with increasing depth in core GC14, located in the Capricorn Channel, October 2004. Avoid – • The use of the term ‘template’, which is used to identify Template records in the MEST, • Using the same **Title** for different metadata records, • Leaving the **Title** field blank, • Using all capital or lower case letters, use the appropriate case, • Acronyms, • Full stops.
Alternate Title		**Short name or abbreviated name by which cited information is known.** *Examples –* • OBIS Marine Data as an alternative title for Ocean Biogeographic Information System (OBIS) Marine Data;

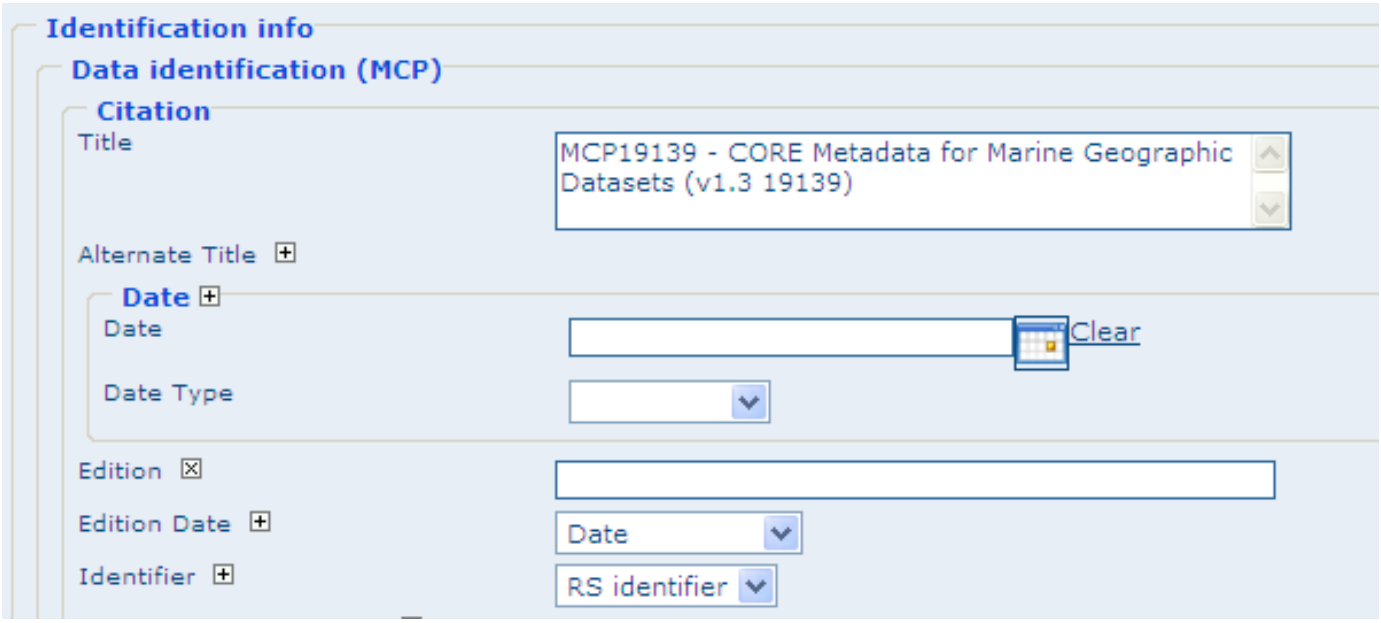
		• CLAM: Myall Lakes as an alternative for Coastal Lake Assessment and Management Tool (CLAM): Myall Lakes, Great Lakes Council.
Date	**M**	**The reference date for the described resource.** Enter the reference **Date**. Format – Selecting the field will activate the use of the calendar. Navigate the calendar to select the reference **Date**. The time and date stamp will be created in the following format YYYY-MM-DDT00:00:00 where Y, M and D are values representing the year, month and day and T the time. *Example –* • 2008-11-28T17:45:45.
Date Type	**M**	**The method used to identify the event associated with the date.** Enter the correct identification for when the event occurred for the resource i.e. does the date identify the creation, publication or revision of the resource. Format – Values are selected from a controlled codelist.
Edition		**Version of the Cited Resource.** This field is currently not utilised by IMAS.
Edition Date		**Date of the edition.** This field is currently not utilised by IMAS.
Identifier		**Unique Identifier for the Resource.** Format – values are selected from a controlled codelist. The default is RS identifier.

Metadata Title Details

Prior to saving and closing the new metadata record ensure that a **Title** has been entered onto the record. Access to the record will **NOT** be possible if it has been saved and closed without Title details.

If a record has been saved and closed without a **Title** select the **Contact us** link from the main page (see **1.1.3 Feedback** for further details). The MEST administrator can update the **Title** details held against the account. Access will then be available

through the normal way.



14. Expand the Cited Responsible Party field group (if applicable). Refer to Appendix 1: Contact details for the completion of contact information.

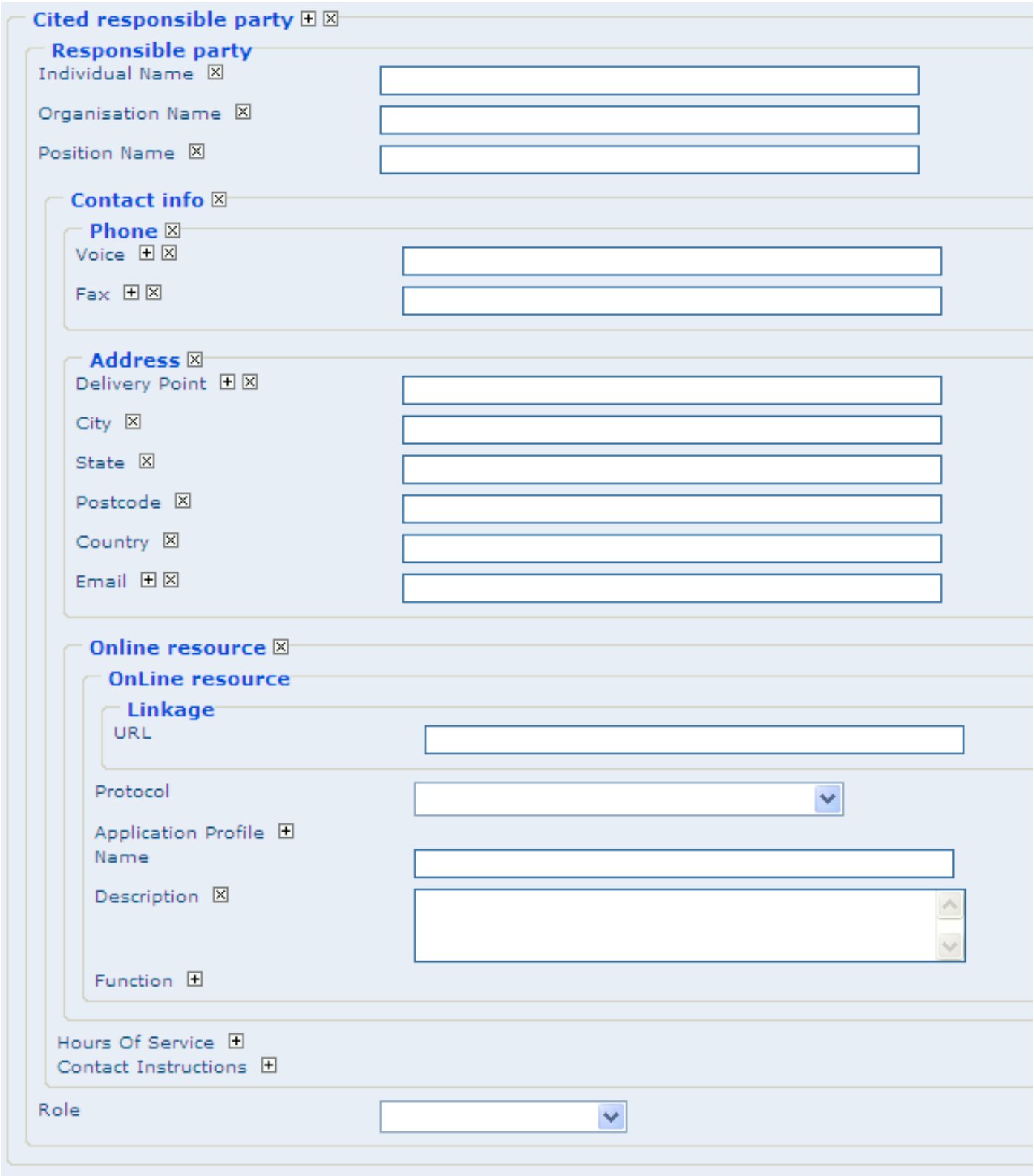
Cited responsible party Party responsible for the resource.		
Responsible party	**M**	Identification of, and means of communication with, person (s) and/or organisation(s) associated with the resource. Format – List contact information for person(s) and/or organisation(s) where the resource was produced. *It may not be necessary to fill out all field blocks within this element. Refer to Appendix 1 for Contact information summary. (Appendix 1: Contact details) See Point of contact for a list of definitions describing all fields within contact details. (Point of contact).*

**** The remaining fields within Citation are currently not utilised by IMAS.**

Cited Responsible Party

The cited responsible party are the intellectual property owners, usually the primary researcher or organisation involved in the research.

The address details refer to where the research was conducted and the position held at that time.



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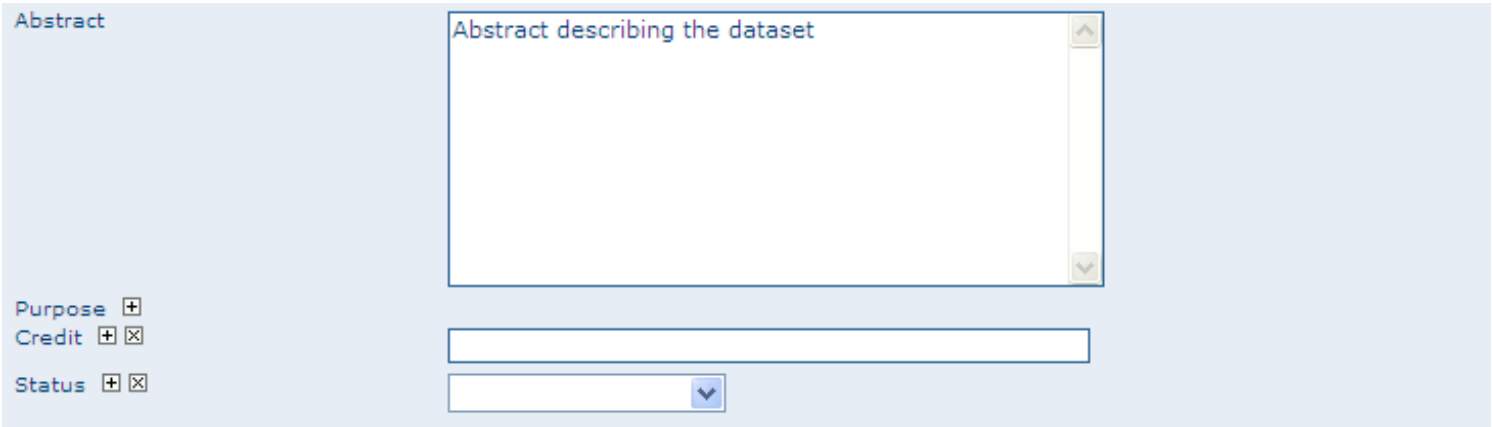
Abstract	**M**	**Brief narrative summary of the content of the resource**. Enter a brief summary of the resource content, starting with a topic sentence, including – • What information was collected (e.g. variables measured), • How it was collected (equipment used, methodology), • A brief statement about the location and/or temporal extent, • Other statements to assist the user to determine if the resource and dataset will be useful. *Examples –* • A unique relationship exists between neighbouring males and females in the fiddler crab, Uca capricornis. This experiment was designed to determine if males and females are unable to associate with multiple partners because their partners aggressively repel same-sex intruders. Experiments were conducted in the East Point Reserve, Darwin from November-January in 2002-2006. 15 male-female pairs were located and the burrow of the male or the female (in a random order) was blocked. We tethered a size-matched same-sex or opposite sex intruder (in a random order) half way between the burrows. Once the focal individual emerged we documented whether it pushed or grappled (fought) with the intruder within 5 minutes. After each trial, we unblocked the burrow and allowed the pair to interact normally for 10 minutes before running the next trial. In this way we observed the reactions of both pair members to same- and opposite-sex intruders. Therefore for each pair, 4 experiments were undertaken: original female vs. intruder female, original female vs. intruder male, original male vs. intruder male, original male vs. intruder female. The results indicated that males and females were equally likely to respond aggressively to intruders of the same sex. Both were less likely to fight intruders of the opposite sex. • In recent years the term 'enhanced greenhouse effect' has become well known in modern society and yet aspects of this possible 'future climate' are poorly understood. The characteristics of the geological record provide a basis to understand this possible future climate through the examination of alternating glacial (cold) and interglacial (warm) stages. Understanding the variability of sea-surface temperature and biological processes in the water column provides insight into general circulation of present and paleo-ocean currents. The core obtained offshore from Sumatra (BAR9043, 104.0316E, 5.82S) highlights an upwelling signal at 14,000 yrs BP that disrupts the warm stratified water column, which was a feature between Marine Isotope

		Stage (MIS) 3 to present. This upwelling is timed to a regional pattern of an intensified Australasian Monsoon.
Purpose	**O**	**Brief summary of the intention for which the resource was developed.** *Examples –* • To determine the impact of introduced species in the Derwent River; • To measure reproductive success of seal species in the Southern Ocean; • This data was collected as part of the Beachwatch program.
Credit	**O**	**Recognition of the contributors to the resource.** *Examples –* • University of Tasmania; • Australian Research Council (ARC); • Dr Ruth Cullen.
Status	**O**	**Status of the resource.** Format - Values are selected from a controlled codelist.



Point of contact Identification of and means of communication with, person(s) and/or organisation(s) associated with the resource. Format - List current contact information. Full contact details are always listed under **Point of contact.**		
Individual Name	**C**	Identification of and means of communication with, person(s) and/or organisation(s) associated with the resource. Detail the individual responsible for the creation and management of a resource.

		Format - Surname, given name, title separated by a delimiter. *Examples* – • Magierowski, Regina, Dr • Magierowski, Regina • Magierowski, R.H., Dr • Magierowski, R.H. • Magierowski, R., Dr • Magierowski, R. Obligation – Conditional. Must exist if **Organisation Name** and **Position Name** are not documented.
Organisation Name	**C**	**Where the person(s) and/or organisation(s) are currently located.** Detail the organisation responsible for the creation and management for the resource. *Examples* – • Geoscience Australia • University of Tasmania Obligation – Conditional. Must exist if **Individual Name** and **Position Name** are not documented. Avoid – • Acronyms
Position Name	**C**	**The current position of the person(s) responsible for the resource (within the organisation).** Detail the position of the person within an organisation responsible for the creation and management of the resource. *Examples* – • Data Manager • Director Obligation – Conditional. Must exist if **Individual Name** and **Organisation Name** are not documented.

Voice	**O**	**Identifies the telephone number by which enquirers can speak to the responsible party.** Enter the telephone contact details that will allow an enquirer to speak with the responsible party. Format – [International Code][Area Code] [Number] *Examples* – • Landline – 61 3 1234 5678 • Mobile – 61 123 456 789
Fax	**O**	**Identifies the fax number by which enquirers can contact the responsible party.** Enter the fax details that will allow an enquirer to communicate with the responsible party. Format – [International Code][Area Code] [Number] *Example* – • 61 3 1234 5678
Delivery Point	**O**	**Identifies the address of the location.** Enter the first line of address details that will allow the enquirer to communicate with the organisation responsible for the resource. Format – The first line of address to be entered. Where required separated by a delimiter *Example*s – • PO Box 123 • Level 3, 123 Main Street
City	**O**	**Identifies the city of the location.** Enter the **City** details that will allow the enquirer to communicate with the organisation responsible for the resource. *Example* – • Hobart

State	**O**	**Identifies the state of the location.** Enter the state details that will allow the enquirer to communicate with the organisation responsible for the resource. Abbreviations can be used. *Example* – • Tasmania • TAS
Postcode	**O**	**Identifies the postcode of the location.** Enter the postcode details that will allow the enquirer to communicate with the organisation responsible for the resource. *Example* – • 7005
Country	**O**	**Identifies the country of the location.** Enter the **Country** details that will allow the enquirer to communicate with the organisation responsible for the resource. *Example* – • Australia Avoid – • Using abbreviations
Email	**O**	**Identifies the email address of the cited responsible party.** Enter the email contact details that will allow an enquirer to speak with the responsible party or organisation. *Example* – • test@testemail.com

How do I ensure my contact details remain up-to-date?

Contact IMAS data manager: imas.datamanager@utas.edu.au, with the required changes, and they will update the relevant metadata records (see **1.1.3 Feedback** for more details).

.

Online resource	**O**	**The location (address) for online access for the contact person(s).** Avoid – • Links to resource and/or data sets

**** Remaining fields within Online Resource are currently not utilised by IMAS.**

Role	**M**	**Identifies the function performed by the responsible party.** Select the role of the designated contact for the resource. Format – Values are selected from a controlled codelist.

How do I decide which 'Role' is correct to describe the function performed?

The role should be the most obvious one as it relates to the research.

An individual's **Role** should not change throughout the metadata record, so that if a person is the principal investigator, they should be identified as such throughout the record.

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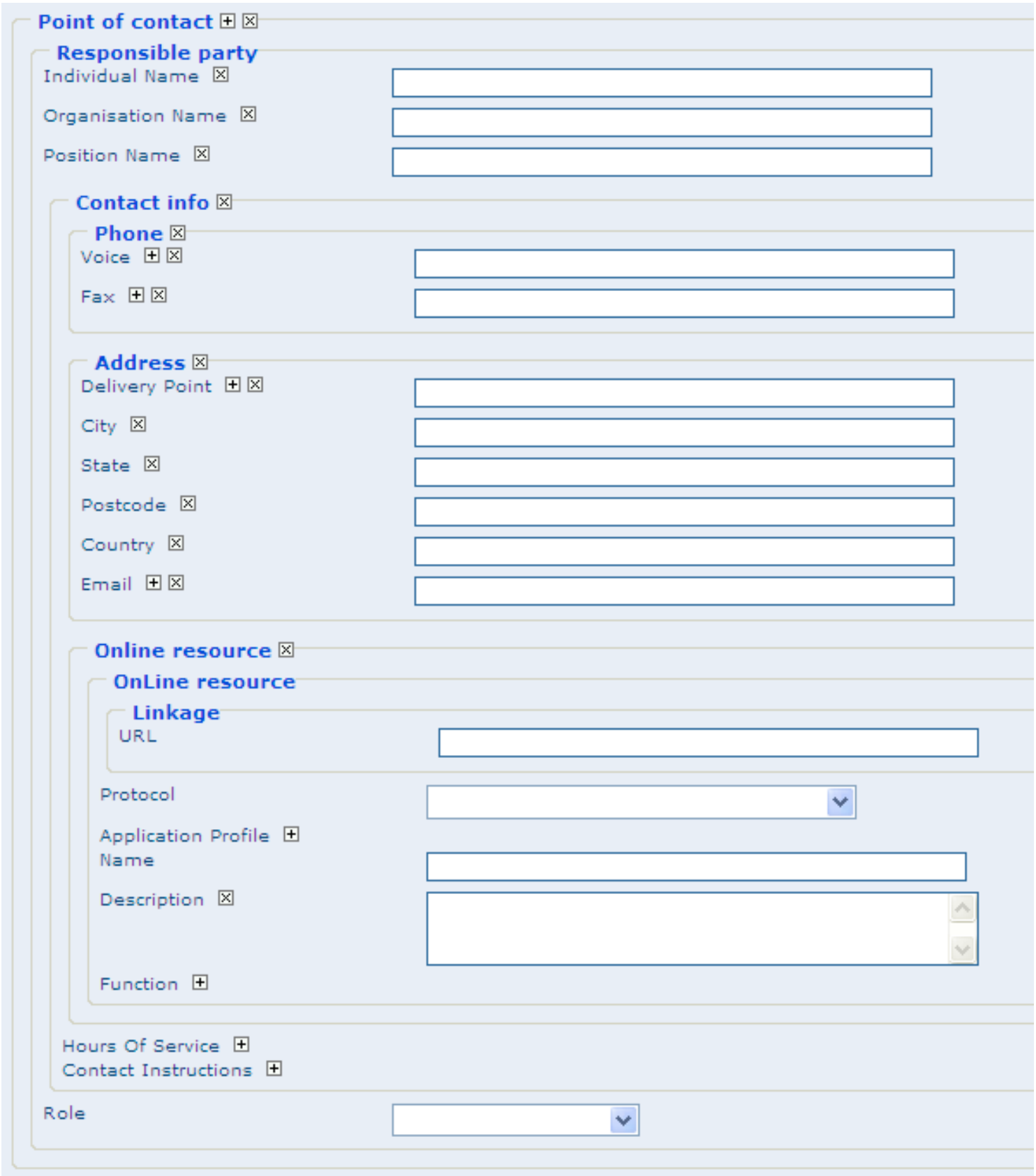
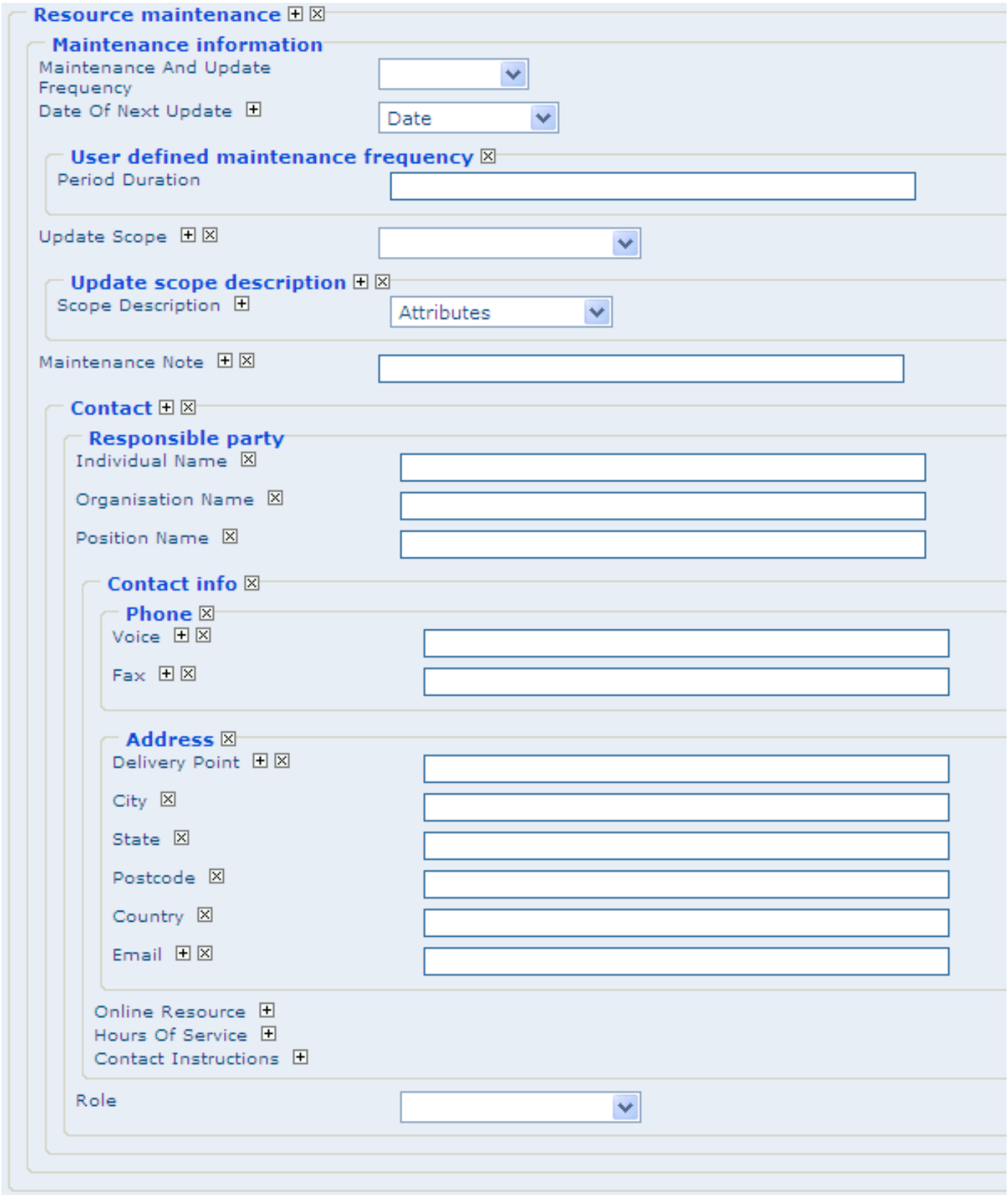


15. Expand the Resource Maintenance field block. Complete the relevant fields.

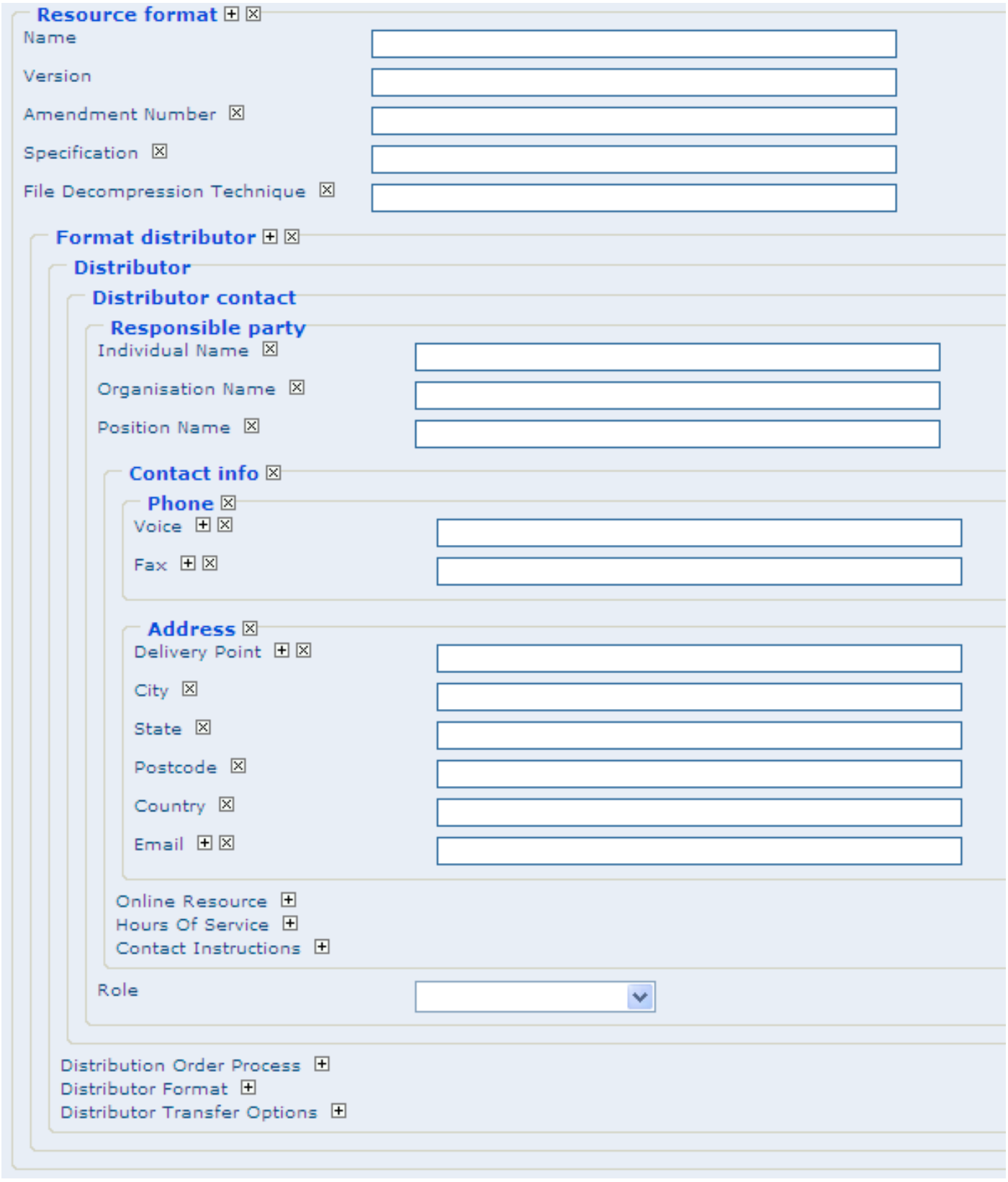
Resource maintenance Provides information about the frequency of resource updates, and the scope of those updates.		
Maintenance And Update Frequency	**M**	**Frequency with which changes and additions are made to the resource after the initial resource is completed.** Format - Values are selected from a controlled codelist.
Date Of Next Update		**Scheduled Revision Date for resource (YYYY-MM-DD).** Date is selected from an automated calendar. This field is currently not utilised by IMAS.
User Defined Maintenance Frequency		**Maintenance period other than those defined.** This field is currently not utilised by IMAS.
Update Scope		This field is currently not utilised by IMAS.
Update scope description		This field is currently not utilised by IMAS.
Maintenance Note		**Information regarding specific requirements for maintaining the resource.** This field is currently not utilised by IMAS.
Contact		**Party responsible for resource maintenance.** This field is currently not utilised by IMAS. Format - List current contact information. *It may not be necessary to fill out all field blocks within this element. Refer to Appendix 1 for Contact information summary. (Appendix 1: Contact details) See Point of contact for a list of definitions describing all fields within contact details (Point of contact).*


Resource maintenance
Maintenance information
Maintenance And Update Frequency
Date Of Next Update
Date
User defined maintenance frequency
Period Duration
Update Scope
Update scope description
Scope Description
Attributes
Maintenance Note
Contact
Responsible party
Individual Name
Organisation Name
Position Name
Contact info
Phone
Voice
Fax
Address
Delivery Point
City
State
Postcode
Country
Email
Online Resource
Hours Of Service
Contact Instructions
Role

16. Expand the Resource Format field block. Complete the relevant fields.

Resource format Provides a description of the format of the resource.		
Name	**M**	**Name of the resource format.** *Examples –* • Microsoft Excel • Microsoft Office Document Imaging • Adobe Reader 8
Version	**M**	**Version of the format (date, Number, Etc.)** *Examples –* • 2007 • 11.0 • v.8.1.2

**** Remaining Fields within Resource Format are currently not utilised by IMAS.**



17. Expand the Descriptive Keywords field block. Complete the relevant fields.

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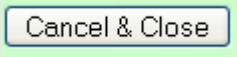
Descriptive keywords
Commonly used word(s), formalised word(s) and/or phrase(s) used to describe the dataset.

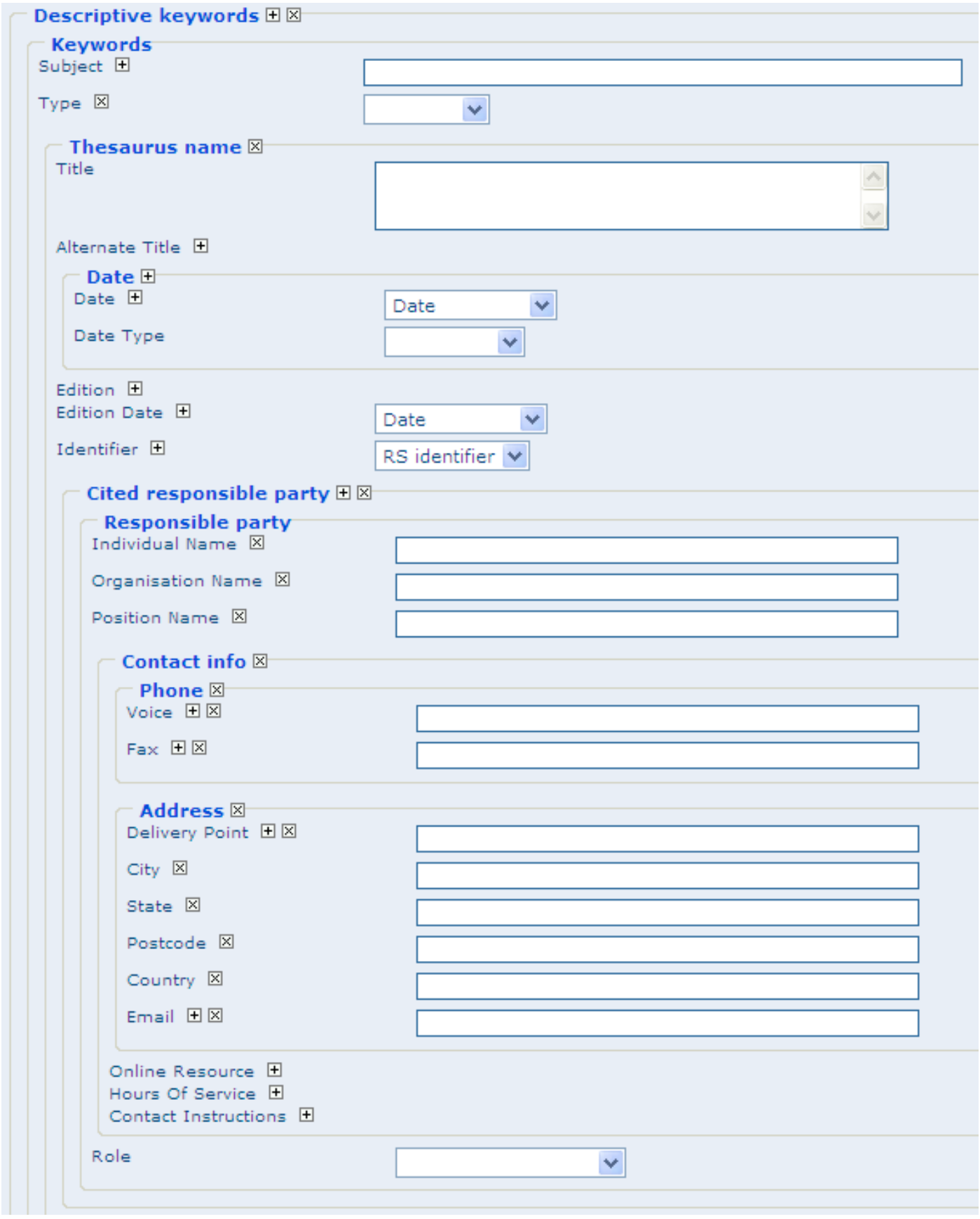
Format – There are several options when entering Descriptive keywords. Keywords can be selected by the resource owner (e.g. free text), from a formalised thesaurus (e.g. Global Change Master Dictionary (GCMD) and Codes for Australian Aquatic Biota (CAAB)), and/or entered as a geographic location.

The GCMD thesaurus opens automatically when using the Descriptive Keywords field, however the additional options described can be added simply by selecting 

on the thesaurus.

Below are descriptions of the possible Keyword options you can enter in this element. If selecting more than one option, expand the descriptive keywords field using the **[+]** button.

Obligation – All Descriptive keyword options are optional - a user may only need the GCMD thesaurus or free text to describe their resource. Select the appropriate category (ies) to describe your data.


Descriptive keywords
Keywords
Subject
Type
Thesaurus name
Title
Alternate Title
Date
Date
Date
Date Type
Edition
Edition Date
Date
Identifier
RS identifier
Cited responsible party
Responsible party
Individual Name
Organisation Name
Position Name
Contact info
Phone
Voice
Fax
Address
Delivery Point
City
State
Postcode
Country
Email
Online Resource
Hours Of Service
Contact Instructions
Role

It is not mandatory to fill out all fields within the **Descriptive Keyword** element. Those that are relevant to each option are listed below.

The Global Change Master Dictionary (GCMD) opens automatically when clicking on the Descriptive Keywords field. To avoid this, before entering text, first click to the left of the field and press the tab button on your keyboard.

Free text *(content example)* The resource owner's keywords to describe the dataset.		
Subject		Enter free text. *Examples* – salinisation, larvae provisioning, variability, mortality, larvae Expand subject line for each word by clicking the **[+]** symbol.
Type		Select **theme** from controlled codelist.

GCMD *(content example)* A formalised thesaurus of default keywords, automatically opens when click on the field box.		
Subject		Click on the field box to open the automated thesaurus. Format – count the set of three words generated by GCMD a single keyword. *Examples* – • Oceans | Marine Biology | Marine Invertebrates; • Biosphere | Ecological Dynamics | Primary Production; • Hydrosphere | Snow/ice | Ice Extent Expand subject line for each keyword category by clicking the [+] symbol.
Type		Select **theme** from controlled codelist.
Thesaurus name This category requires a citation of the thesaurus responsible for generating the keywords.		

Title		Global Change Master Directory Earth Science Keywords v5.3.8
Date		2007-04-17T10:31:12
Date Type		Revision
Cited responsible party Organisation that owns the reference.		
Organisation Name		NASA
Online resource – Linkage		http://gcmd.gsfc.nasa.gov/Resources/valids/
Online resource - Name		Global Change Master Directory - NASA
Role		Select **owner** from the controlled codelist.

**** Remaining fields within Thesaurus name are currently not utilised by IMAS.**

CAAB codes *(content example)* A standardised 8-digit coding system for aquatic organisms in the Australian region. Includes, invertebrates, vertebrates, plants and algae.		
Subject		Enter CAAB code, scientific name (free text), common name (free text). Format – Codes for Australian Aquatic Bioga (CAAB) can be found at: http://www.cmar.csiro.au/caab/ *Examples* – • 37 013001, Orectolobus ornatus, Banded Wobbegong; • 40 041042, Puffinus griseus, Sooty shearwater. Expand subject line for each entry by clicking the [+] symbol.
Type		Select **taxon** from controlled codelist.

Thesaurus name This category requires a citation of the thesaurus responsible for generating the keywords.		
Title		CAAB - Codes for Australian Aquatic Biota v2.
Date		1999-09-01T19:00:00
Date Type		publication
Cited responsible party Organisation that owns the reference.		
Organisation Name		CSIRO Marine and Atmospheric Research
Online resource – Linkage		http://www.marine.csiro.au/caab/
Online resource - Name		CSIRO CAAB codes website
Role		Select **owner** from the controlled codelist.

**** Remaining fields within Thesaurus name are currently not utilised by IMAS.**

Geographic location ***(content example)*** The geographic location of the resource. This can be entered manually or selected from a controlled codelist.		
Subject		Either enter in own geographic location or select from controlled codelist provided. *Examples* – • Tasmania; • Port Phillip Bay; • Sandringham Yacht Club.
Type		Select **place** from controlled codelist.
Thesaurus name This category requires a citation of the thesaurus responsible for generating the keywords.		
Title		Marine Community Profile v1.4 Geographic extent names

Date		2008-10-30
Date Type		revision
Cited responsible party Organisation that owns the reference.		
Organisation Name		Australian Ocean Data Centre Joint Facility (AODCJF)
Online resource – Linkage		http://www.aodc.gov.au/
Online resource - Name		AODC website
Role		Select **owner** from the controlled codelist.

**** Remaining fields within Thesaurus name are currently not utilised by IMAS.**

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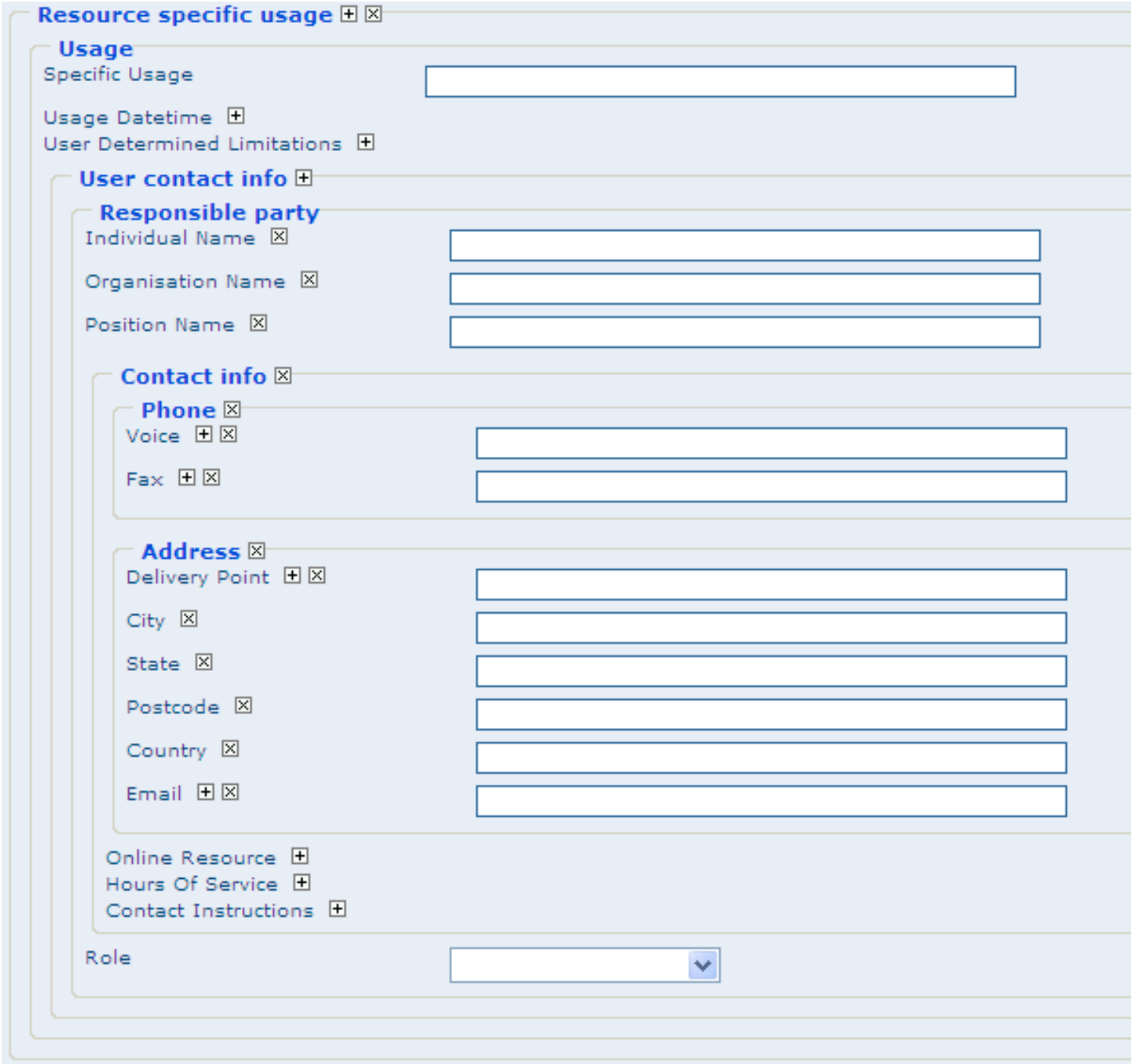
18. Expand the **Resource specific usage** field block. Complete the relevant fields. **This is not currently utilised by IMAS.**

Resource specific usage		**Provides basic information about specific application(s) for which the resource has/has been or is being used by different users.**

Refer to Appendix 1: Contact details for further information about the **Contact info** field-block.



13. Expand the Resource Constraints field block. Complete the relevant fields.

Resource Constraints
Provides information about constraints which apply to the resource.

Legal constraints Restrictions and legal prerequisites for accessing and using the resource.		
Use Limitation		
Access Constraints		

Use Constraints		
Other Constraints		

Security constraints Restrictions imposed on the resource for security concerns.		
Use Limitation		
Classification		
User Note		
Classification System		
Handling Description		

Constraints Any other restrictions on the access or use of the resource		
Use Limitation		

Creative Commons		
Use Limitation		
Licence Selector		
Attribution Constraints		
Other Constraints		

**** Remaining fields within Resource constraints are currently not utilised by IMAS.**

Copyright licensing

By making your resource available you are allowing someone to exercise one or more of the exclusive rights of your copyright ownership. To ensure that you are appropriately attributed as the copyright owner and/or to limit the way the resource is used, you should attach a copyright licence to your metadata record. A licence does not assign (transfer) ownership of copyright to another person, it simply grants a permission to exercise certain rights. There are a number of standard-form licences that can be adopted by organisations or individuals, the most commonly used type for information published on the internet is the **Creative Commons licence**.
Creative Commons licensing is based on the U.S. Copyright Act, it thus functions within the vast majority of legal systems operating across the world. For more information about Creative Commons Licensing visit http://creativecommons.org/, the FAQ page on this site should cover most of your questions (http://wiki.creativecommons.org/Frequently_Asked_Questions).
The rights given via a Creative Commons licence are the rights to copy, distribute, display and perform the work. A Creative Commons licence can subject these rights to certain conditions, such as:

1. **Attribution** – this applies to every Creative Commons licensed work and means that whenever the work is copied or redistributed the author/creator must be reasonably credited;

2. **Non-commercial** – the work can be used for non-commercial purposes only;

3. **Non-derivative** – only exact copies of the work (not derivative works based on the original work) can be made, displayed and performed; and

4. **Share-Alike** – users may distribute derivative works, but only under a license identical or similar to the one that governs the original work.

These conditions can be used individually or can be combined. The only conditions that are incompatible and therefore cannot feature in the same license are the non-derivative and share-alike options.

For most resources submitted to IMAS, a Creative Commons Attribution licence will be most appropriate copyright licence to use.

The current convention for IMAS records is to select a creative commons licence and add the appropriate content as follows (omitting the statement about access to the data, if the data is uploaded):

Resource constraints

Creative Commons

Current License
Jurisdiction: au Attribution 2.5 Australia

Attribution Constraints	The citation in a list of references is: citation author name/s (year metadata published), metadata title. Citation author organisation/s. File identifier and Data accessed at (add http link).
Other Constraints	Please contact the researcher for access to data.

Resource constraints

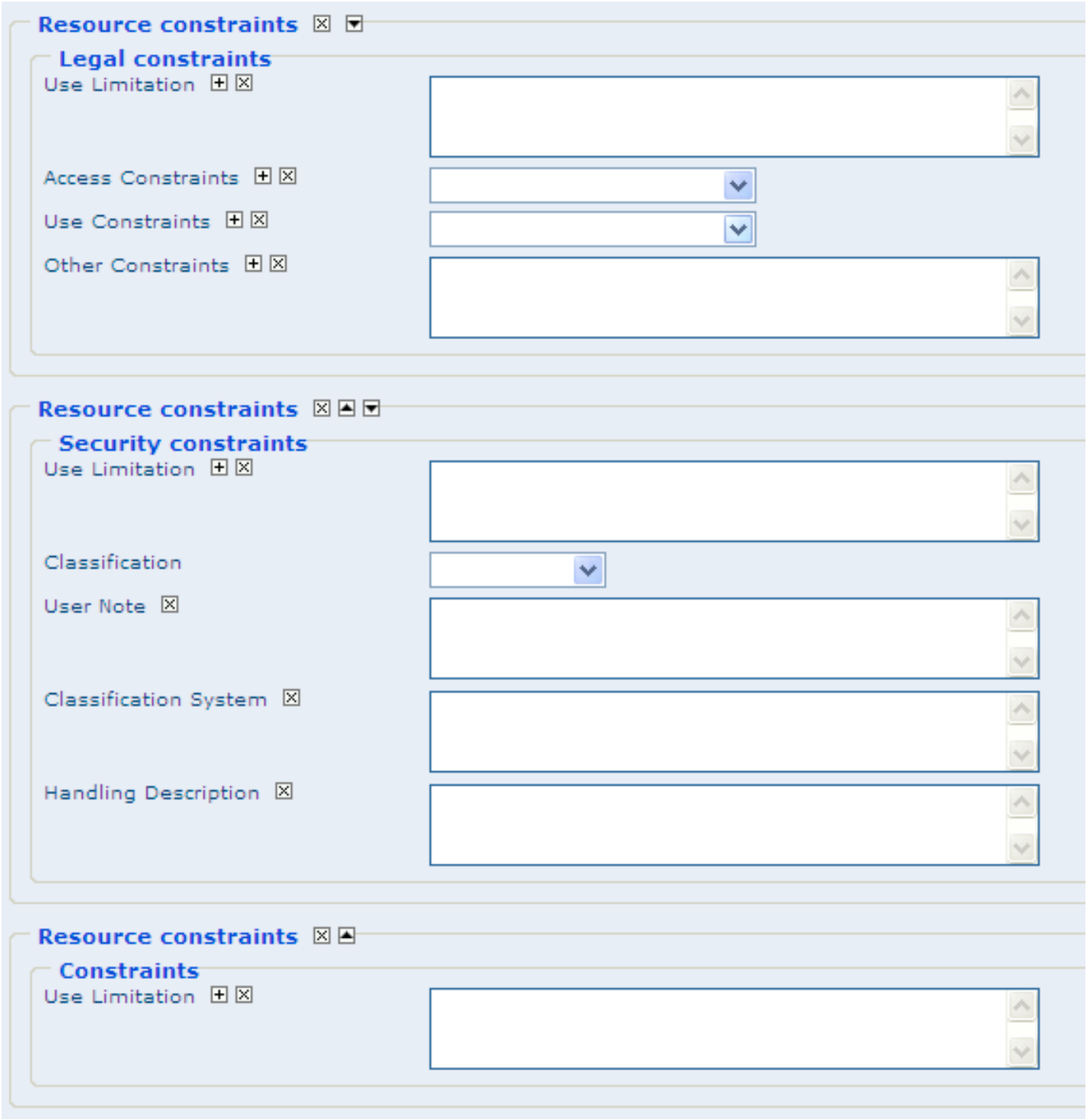
Security constraints

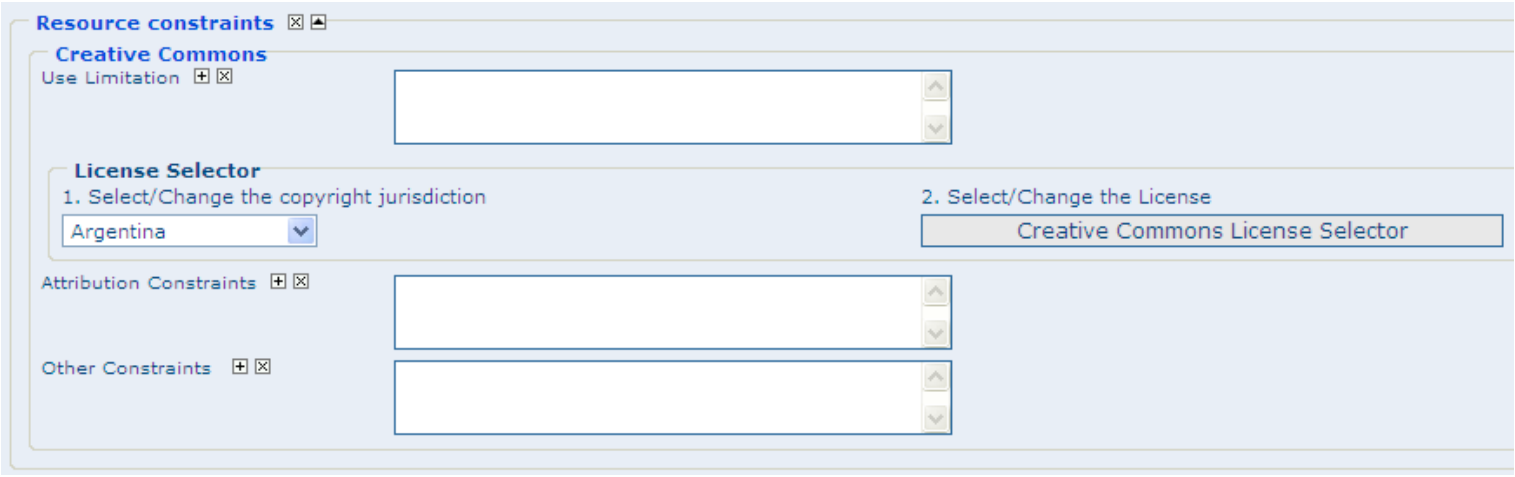
Classification	**unclassified**: available for general disclosure

Resource constraints

Constraints

Use limitation	The data described in this record are the intellectual property of the University of Tasmania through the Institute of Marine and Antarctic Studies.


Resource constraints
Legal constraints
Use Limitation
Access Constraints
Use Constraints
Other Constraints
Resource constraints
Security constraints
Use Limitation
Classification
User Note
Classification System
Handling Description
Resource constraints
Constraints
Use Limitation



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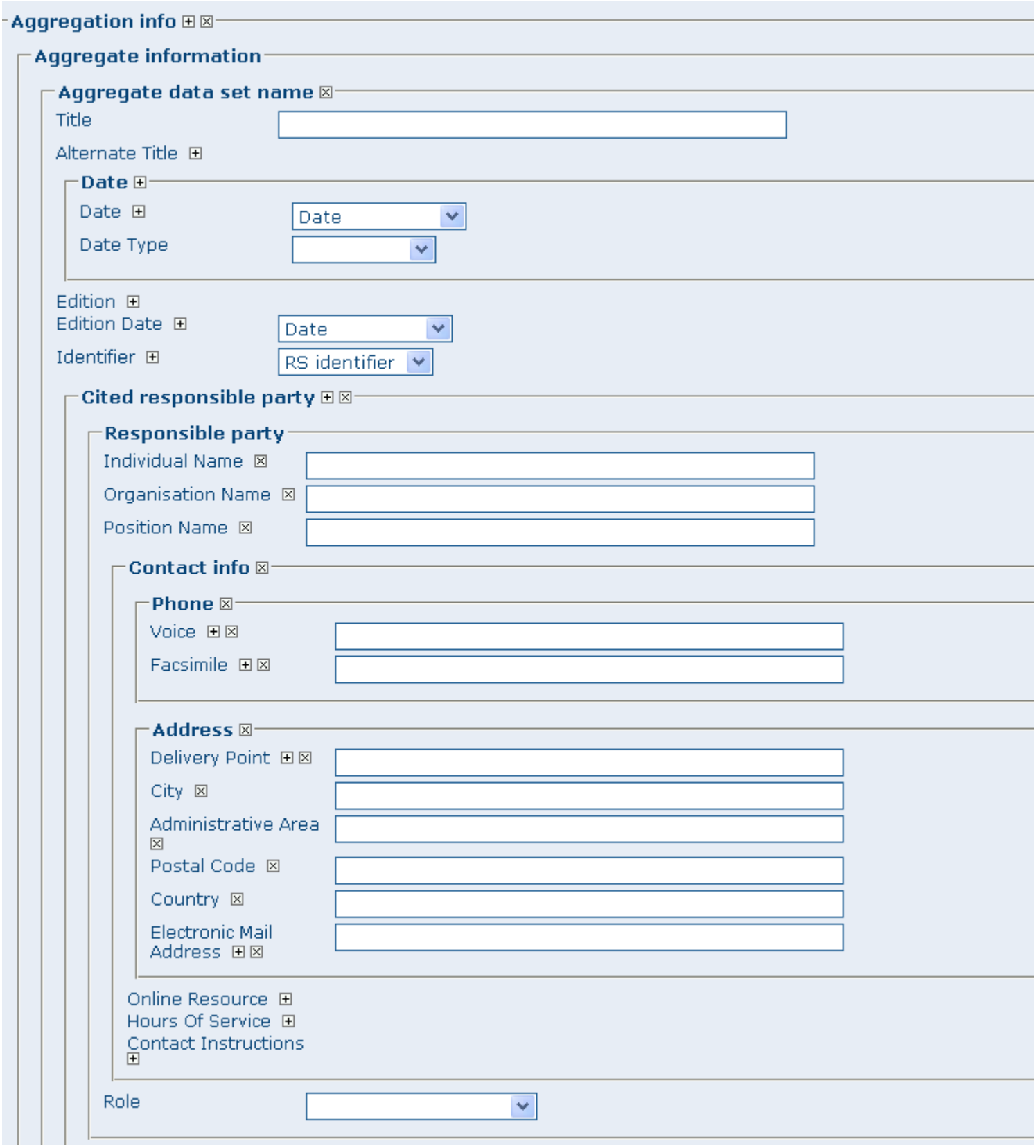
14. Expand the Aggregation info field block. Complete the relevant fields.

Aggregation info Provides details on aggregate datasets associated with the resource.		
Aggregation data set name Citation details identifying the aggregated data resources.		
Title	**M**	**Title for the aggregated dataset.** *Examples* - • World Ocean Atlas 2005 • Phytoplankton concentrations in Sydney Harbour, 2007
Alternate Title		**Short name or abbreviated name by which aggregated dataset is known.** This field is currently not utilised by IMAS.
Date	**M**	**The reference date for the aggregated dataset.** Format – Selecting the field will activate the use of the calendar. Navigate the calendar to select the reference **Date**. The time and date stamp will be created in the following format YYYY-MM-DDT00:00:00 where Y, M and D are values representing the year, month and day and T the time. *Example* – • 2008-11-28T17:45:45.
Date Type	**M**	**The method used to identify the event associated with the date.** Enter the correct identification for when the event occurred for the resource i.e.

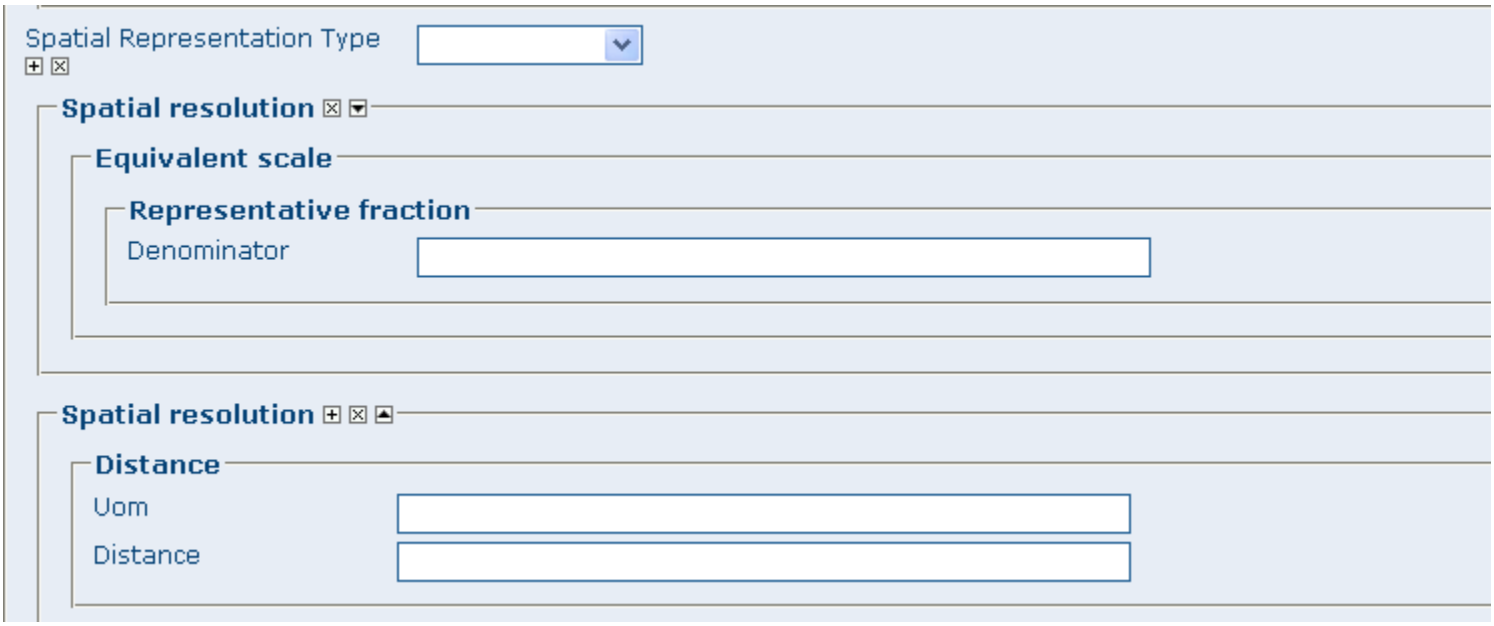
		does the date identify the creation, publication or revision of the resource. Format – Values are selected from a controlled codelist.
Edition		**Version of the Cited aggregation.** This field is currently not utilised by IMAS.
Edition Date		**Date of the edition.** This field is currently not utilised by IMAS.
Identifier		**Unique Identifier for the aggregation.** Format – values are selected from a controlled code list. The default is RS identifier.
Cited responsible party		**Contact details for the person(s) who created the aggregation.** This field is currently not utilised by IMAS. Format - List current contact information. *It may not be necessary to fill out all field blocks within this element. Refer to Appendix 1 for Contact information summary. (Appendix 1: Contact details) See Point of contact for a list of definitions describing all fields within contact details (Point of contact)).*

****Remaining fields within Aggregation Info are currently not utilised by IMAS.**


Aggregation info
Aggregate information
Aggregate data set name
Title
Alternate Title
Date
Date
Date
Date Type
Edition
Edition Date
Date
Identifier
RS identifier
Cited responsible party
Responsible party
Individual Name
Organisation Name
Position Name
Contact info
Phone
Voice
Facsimile
Address
Delivery Point
City
Administrative Area
Postal Code
Country
Electronic Mail Address
Online Resource
Hours Of Service
Contact Instructions
Role

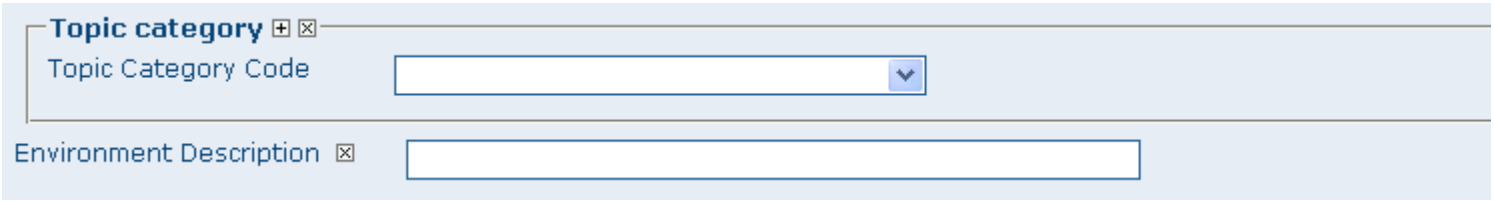
Spatial Representation Type	**O**	**The method used to spatially represent geographic information.** Enter the method used to represent geographic information in the dataset. Format – Values are selected from a controlled codelist. This field is currently not utilised by IMAS.

Spatial resolution Factor which provides a general understanding of the density of spatial data in the dataset.		
Equivalent scale -Denominator	**O**	**The level of detail expressed as a scale factor or a ground distance.** Enter the **Denominator** information regarding the scale of the original data. *Example –* • 5000 This field is currently not utilised by IMAS.
Distance		This field is currently not utilised by IMAS.



Topic category	**C**	**The main theme(s) of the dataset.**

		Format – Values are selected from a controlled codelist. The default value is **oceans**. Obligation – Must exits if the quality scope is “dataset” or “series”.
Environment Description	**O**	**Description of the resource in the producer’s processing environment.** Includes items such as the software, the computer operating system, file name and data file size. Format – There is no set format at present, but it is recommend to include as much detail as possible. *Examples* – • Microsoft Excel 2003 (xls): Barren Island Kelp bed dive data (Barren_kelpbed_comparison_divedata_20090101.xls) 1091k; • Microsoft Windows 2000 Version 5.1 (Build 2600) Service Pack 1; ESRI ArcCatalog 8.3.0.800. This field is currently not utilised by IMAS.



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Extent
The extent section of a metadata record is used to document geographic, temporal and/or vertical extent of a resource. This section is not mandatory; one of the extent elements must be completed if the record describes a dataset (the signifier that a record describes a data set is that the “Hierarchy level” field content is set to “dataset”).

Geographic element
Description of the spatial extent of the dataset. The user has the option of entering the following –

- Bounding Polygon,
- Bounding Box, and/or
- Geographic Description.

Each selection is detailed separately below.

15. Select the relevant element, and then expand the field by clicking the **[+]** symbol.

Geographic bounding box Used as a quick and simple way of representing spatial extent. It is possible to select the region from the predefined drop-down list or to enter the longitude and latitude coordinates for the location. It should be used to represent a single location or simple arrangements of sites.		
Bounding box	**M**	**Select the geographic position/region of the dataset.** Format – Values are either selected from a controlled codelist or can be entered individually.
North bound latitude	**M**	**Northern-most coordinate of the limit of the dataset extent, expressed in latitude in decimal degrees (positive north).** Enter the details for the approximate geographic position of the dataset. The element assists to make spatial enquiries of datasets. *Example –* • -15.47
West bound longitude	**M**	**Western-most coordinate of the limit of the dataset extent, expressed in longitude in decimal degrees (negative west).** Enter the details for the approximate geographic position of the dataset. The element assists to make spatial enquiries of datasets. *Example –* • 150
South bound latitude	**M**	**Southern-most coordinate of the limit of the dataset extent, expressed in latitude in decimal degrees (negative south).** Enter the details for the approximate geographic position of the dataset. The element assists to make spatial enquiries of datasets. *Example –* • -18.5

East bound longitude	**M**	**Eastern-most coordinate of the limit of the dataset extent, expressed in longitude in decimal degrees (positive east).** Enter the details for the approximate geographic position of the dataset. The element assists to make spatial enquiries of datasets. *Example –* • 150

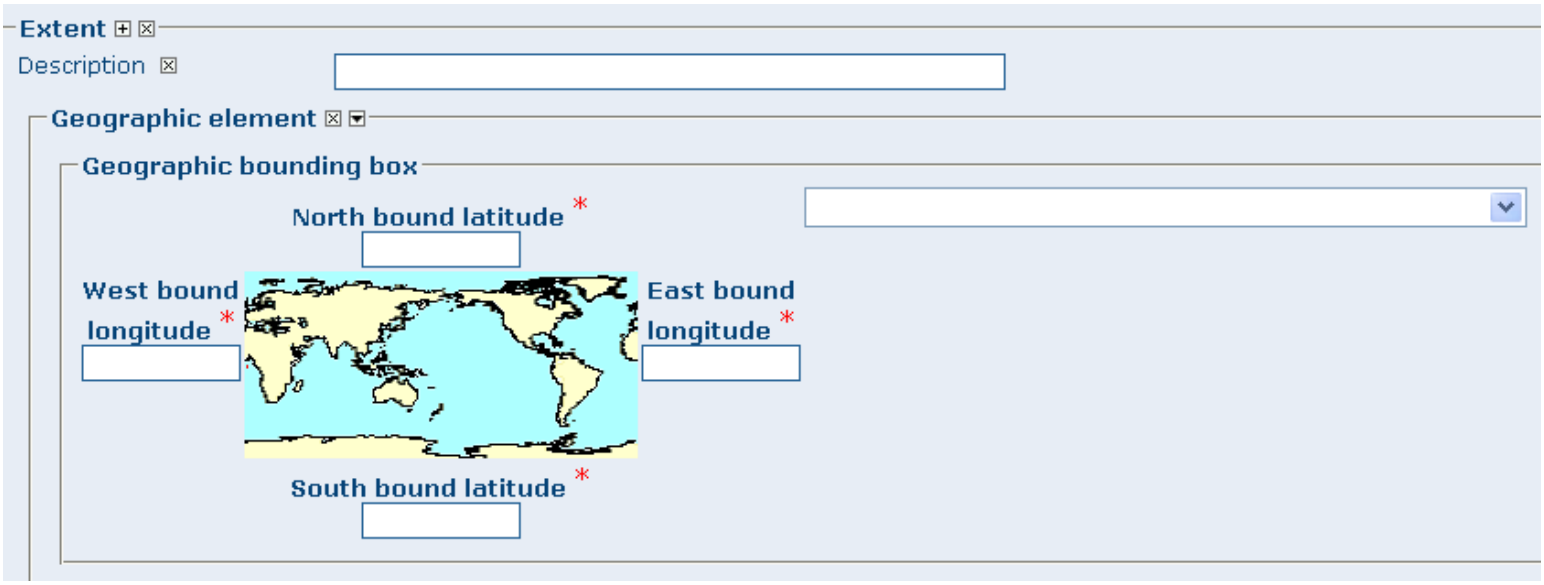
How is a single point represented using the Geographic bounding box?

For a single point the northern extent will be the same as the southern extent and the eastern extent the same as the western extent, for example N = -38.117, S = -38.117, E = 114.533, W = 114.533

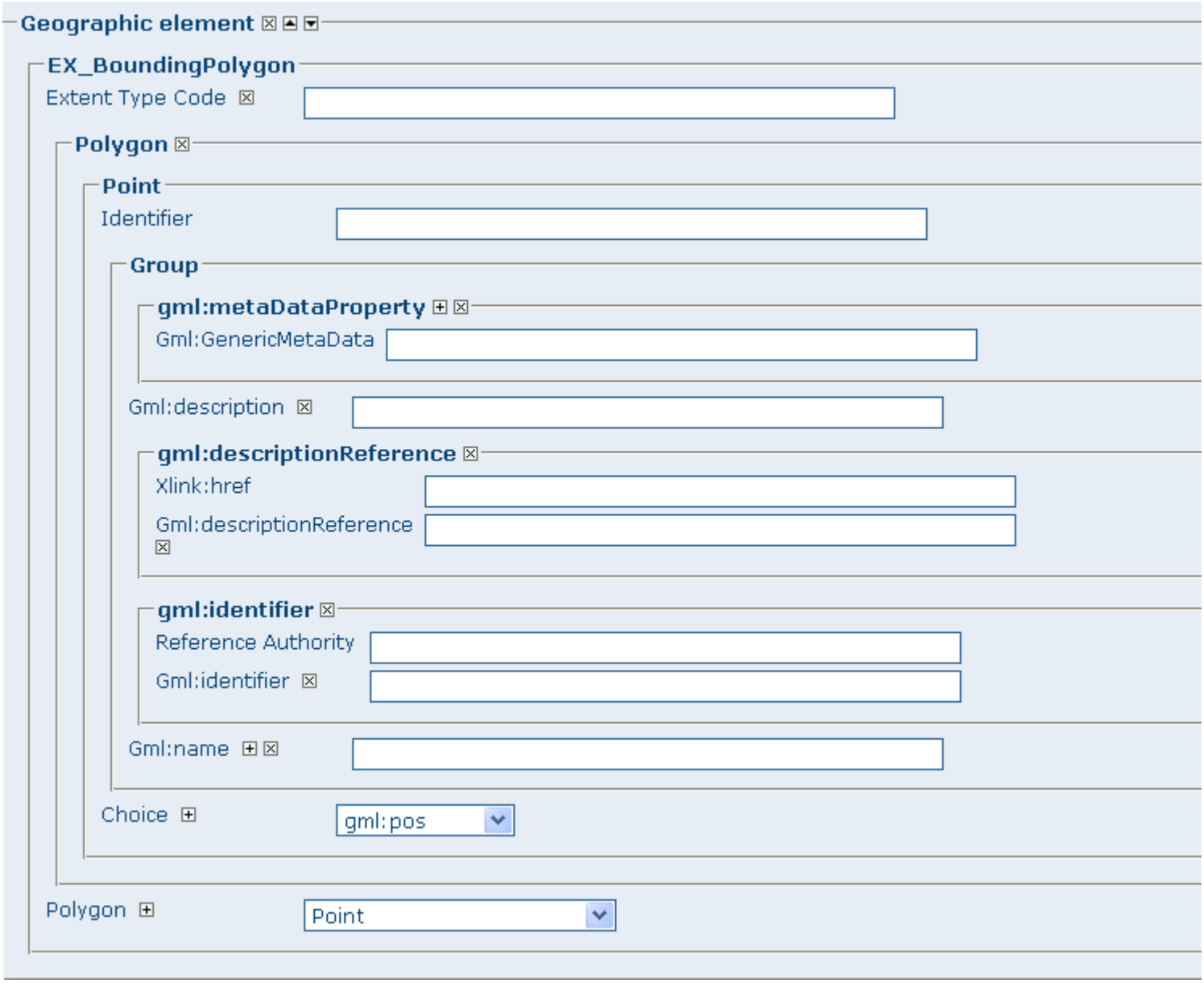
If no thumbnail picture is selected (see **5.3 Adding Thumbnail Images**), a thumbnail will be created automatically based on the coordinates in the **Geographic bounding box**.

A handy tool for helping you define your geographic bounding box can be found at:

http://www.fao.org/geonetwork/srv/en/main.home



EX_BoundingPolygon Boundary enclosing the dataset, expressed as the closed set of (x,y) coordinates of the polygon (last point replicates first point). Obligation - Used for complex arrangements of sampling sites. A bounding polygon can create triangles, rhombuses, or polygons with greater than 4 sides. Mandatory if bounding area is not a perfect oblong.		
Extent Type Code		**Indication of whether the bounding polygon encompasses an area covered by the data or an area where data is not present.** Possible values: '1' for inclusion, or '0' for exclusion.
Polygon		**Set of points defining the bounding polygon. The last point replicates the first point.** Enter coordinates as decimals. *Examples –* • 150.58, -31.45; 151.45, -31.46; 151.56, -32.46; -151.40, -32.47, 150.58, -34.45



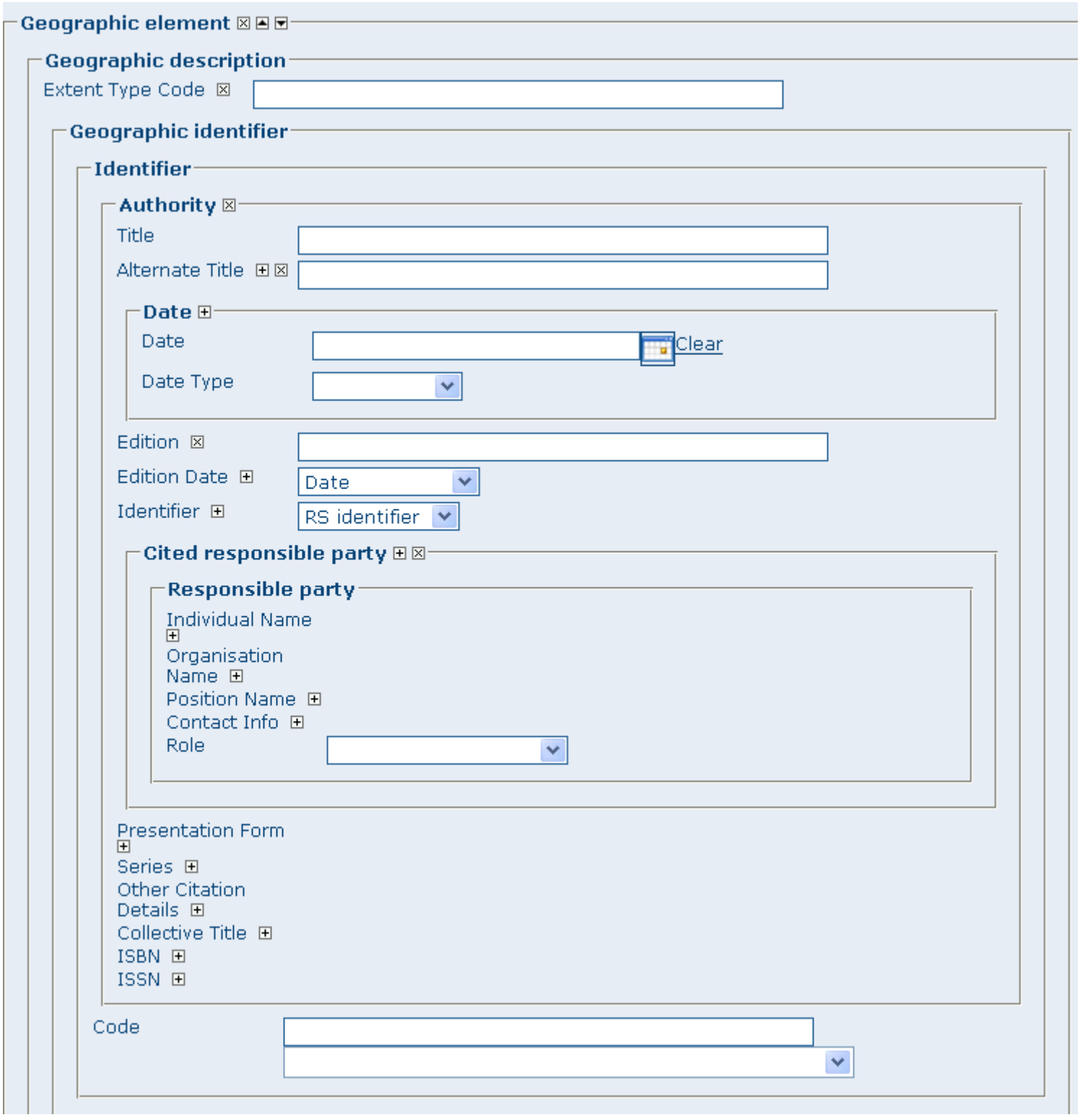
Geographic description
Description of the geographic area within which data is available.

Format – There are several options when entering a Geographic description. Two that are commonly used are c-squares and geographic locations.

Below are descriptions of the possible Geographic description options you can enter in this field. If selecting more than one option, expand the Geographic description field using the **[+]** button.

Obligation – All Geographic description categories are optional – a user may only need to enter a geographic location to describe their resource. Select the appropriate category (ies) to describe your data.

It is not mandatory to fill out all fields within the **Geographic Description** element. Those that are relevant to each option are listed below.



C-squares *(content example)* A system of coded squares, generated from latitude and longitude coordinates, used to display spatial information.		
Geographic identifier Identifier used to represent a geographic area.		
Title		C-squares
Date		2001-12-13T20:05:00
Date Type		creation
Cited responsible party Organisation that owns the reference.		
Individual Name		Rees, Tony, Mr
Organisation Name		CSIRO Marine and Atmospheric Research
Online resource – Linkage		http://www.marine.csiro.au/csquares/index.html
Online resource – Name		C-squares online index
Role		owner
Code		Enter c-squares notation. C-squares are generated from the latitude and longitude coordinates. Please refer to web link below for instructions: **http://www.marine.csiro.au/csquares/index.html**

****Remaining fields within Geographic description are currently not utilised by IMAS.**

When are c-squares necessary?

When research is collected from more than one location. The use of c-squares creates a specific reference for the location (in comparison to using a Bounding box or Bounding polygon, which creates excess space between research locations). Visit the CSIRO's site http://www.marine.csiro.au/csquares/index.html for further information on c-squares.

Geographic Extent Names *(content example)* The geographic location(s) where the data was collected.		
Geographic identifier Identifier used to represent a geographic area.		
Title		Marine Community Profile v1.4 Geographic extent names
Date		2008-10-30
Date Type		revision
Cited responsible party Organisation that owns the reference.		
Individual Name		Australian Ocean Data Centre Joint Facility (AODCJF)
Online resource – Linkage		http://www.aodc.gov.au//
Online resource – Name		AODC website
Role		owner
Code		Either enter in own geographic location or select from controlled codelist provided.

****Remaining fields within Geographic description are currently not utilised by IMAS.**

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Temporal Element

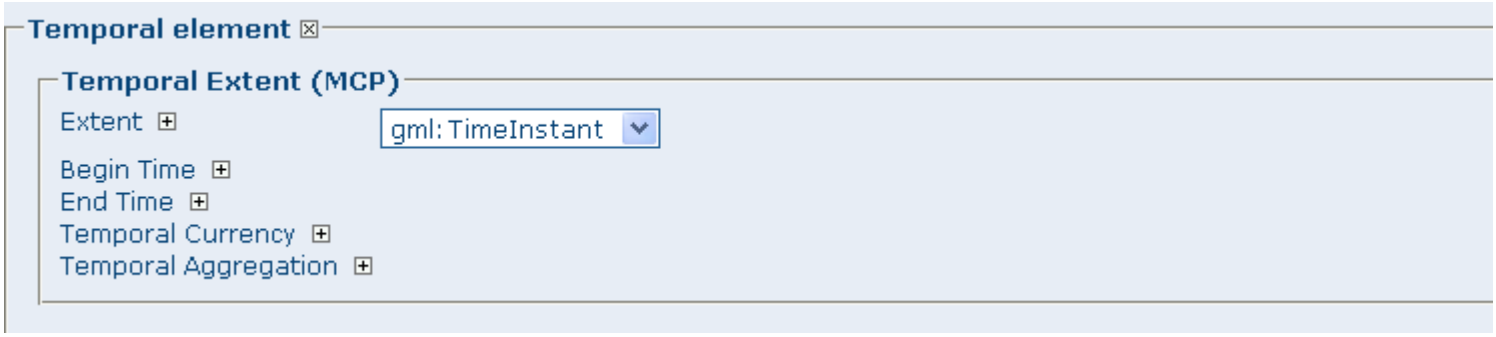
The Temporal Element describes the time period covered by the content of the resource. Enter a begin date, end date and, if necessary, time. There are a few other fields in this section designed for more advanced users.

IF further fields or support is required to complete these fields, contact helpdesk (see **1.1.3 Feedback**).

16. Expand the **Temporal Element** field block. Complete the relevant fields.

Temporal Extent (MCP)		
Extent	**M**	**Date and time for the content of the data resource.** Can be described as temporal instant (a single date/time) or a temporal period (start date and/or end time). Make selection and expand the field. *Example –* • 2005-09-15 T15:17:42
Choice: Begin Date	**M**	**Expand the field and enter the starting date for the validity of the period.** Select from automated calendar.
Choice: End Date	**M**	**Expand the field and enter the ending date for the validity of the period.** Select from automated calendar.

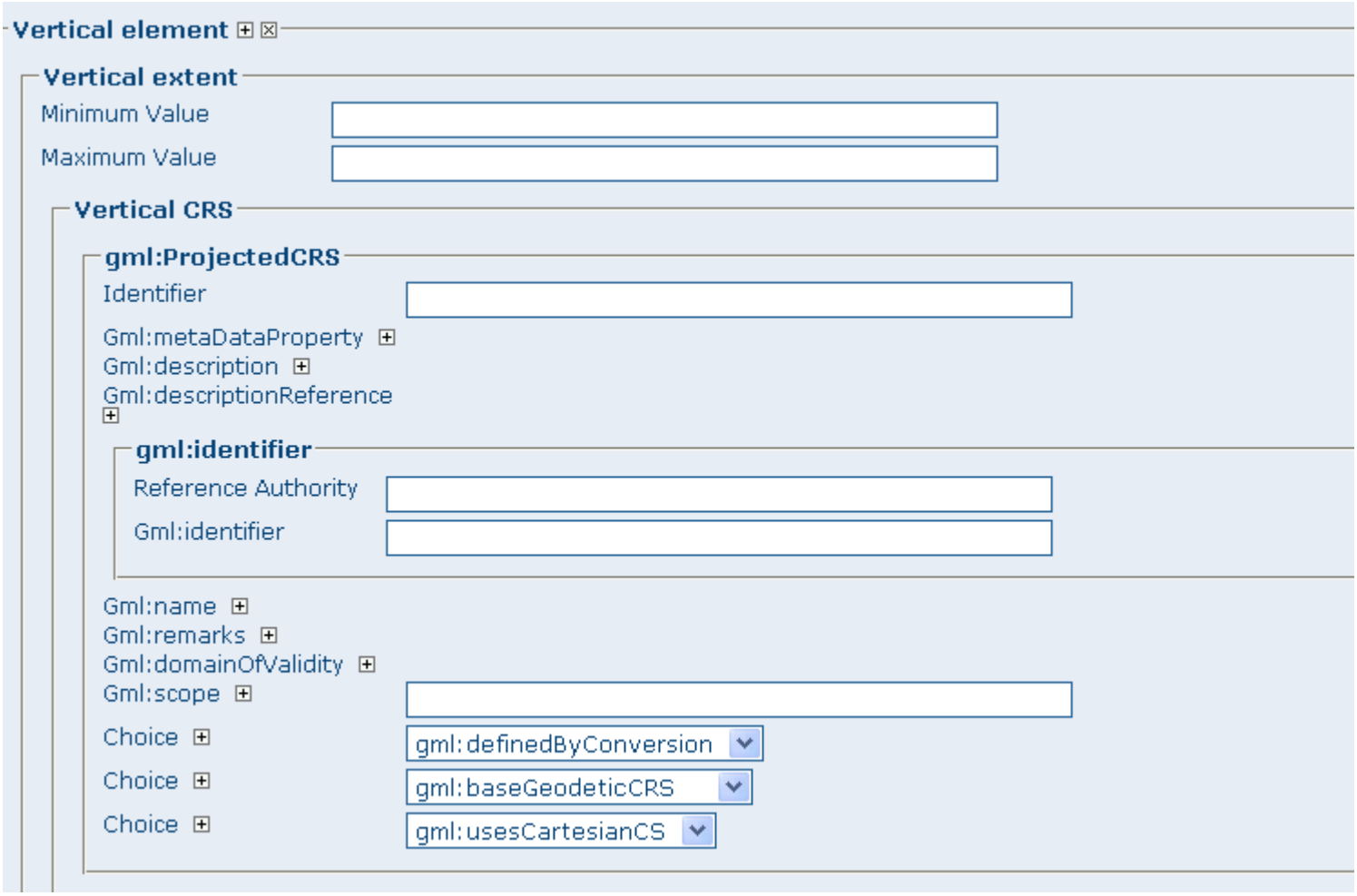
****Remaining fields within Temporal Element are currently not utilised by IMAS.**



Vertical Element
Vertical element provides the vertical component of the extent of the referring object.

17. Expand the **Vertical Element** field block. Complete the relevant fields.

Vertical Element		
Minimum Value	**M**	**Enter a minimum value in metres.** *Example –* • 0
Maximum Value	**M**	**Enter a maximum value in metres.** *Example –* • 4000
Vertical CRS		**The coordinate reference system used for recording height or depths.** This element provides information on the vertical datum used for the data resource. This information is prefilled if the appropriate IMAS template is selected: IMAS template (+ vertical extent relative to mean sea level depth CRS EPSG::5715).

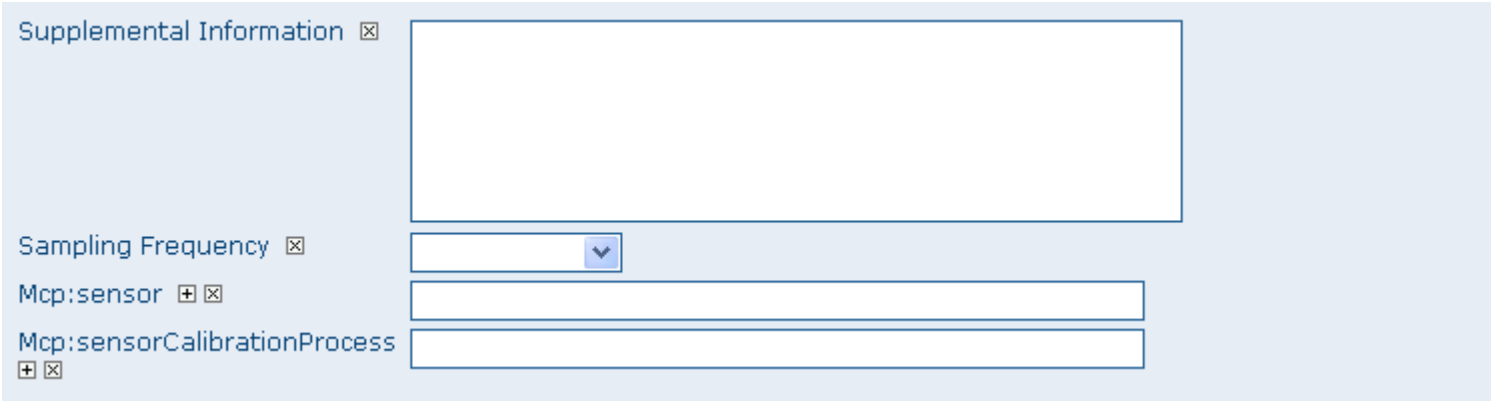


18. Expand the **Supplemental Information** field block. Complete the relevant fields.

Supplemental Information	**O**	**Any additional information that will assist the users understanding of the data.** This element can be used to describe certain characteristics of the dataset which are not covered by any of the other ISO 19115 metadata elements including, publications, taxonomic information, software, equipment, problems encountered, and discrepancies/anomalies. *Example –* • Data were collected aboard the R/V AHI (Acoustic Habitat Investigator), a 25' survey launch owned and operated by the NOAA Pacific Islands Fisheries Science Centre in Honolulu, HI. The R/V AHI's survey sensors include a 240 kHz RESON 8101-ER sonar providing bathymetry and imagery data, a TSS/Applanix POS/MV Model 320 which measures position, velocity, attitude and heading, and a Seabird SBE 19 CTD used to measure sound velocity profiles.
Sampling		

Frequency	**O**	**Describes the frequency the resource is sampled.** Format – Values are selected form a controlled codelist.

****Remaining fields are currently not utilised by IMAS.**

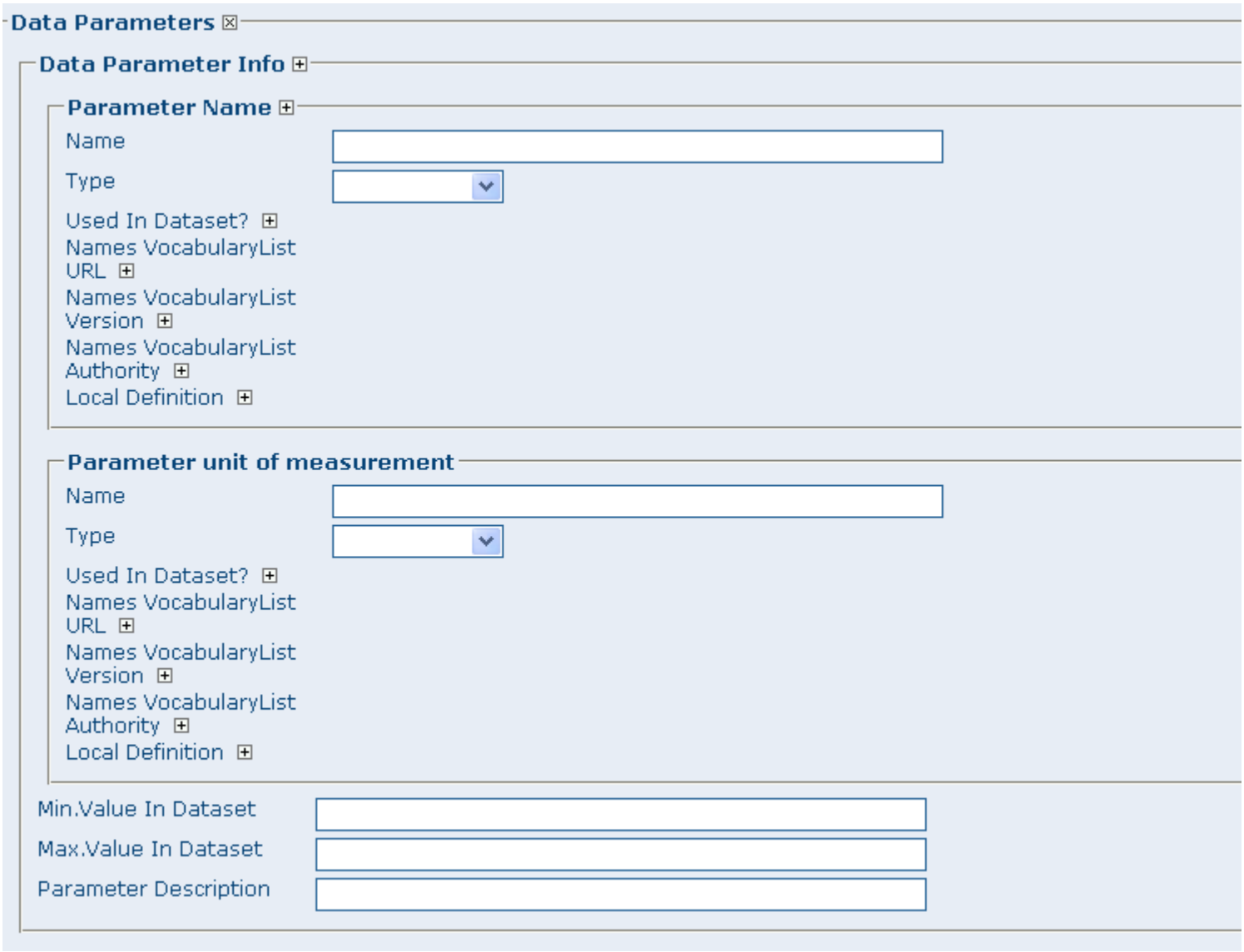


19. Expand the **Data Parameters** field block. Complete the relevant fields.

Data Parameters Describes the parameters or variables used in the dataset.		
Parameter Name		For each data parameter expand the Data Parameter Info field by selecting the [+] symbol and enter the **Name** of the parameter under **Parameter Name.** *Examples* – • Water temperature; • Length; • Barometric pressure. Select a **Type** from the drop-down list to describe the type of name belonging to the parameter. *Examples* – • longName – Copper, University of Tasmania; • shortName – Cop., Uni. of Tas.; • code – Cu, UTas; • other; When a parameter name is used in the dataset, type 'yes' in the Used in Dataset? field.
Parameter unit of		Enter units for that parameter under **Parameter unit of measurement.**

measurement		Format – unit of measurement written in full followed by symbol in brackets. *Examples –* • degrees celsius (°C); • metres (m); • decibars (db).

***** Remaining fields within Data Parameters are currently under construction.***



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5.2.2.3. Maintenance

This Group is currently not utilised by IMAS.

5.2.2.4. Metadata Re-use (Constraints)

This Group is currently not utilised by IMAS.

5.2.2.5. Spat. Info

This Group is currently not utilised by IMAS.

5.2.2.6. Ref. system

This Group is currently not utilised by IMAS.

5.2.2.7. Distribution

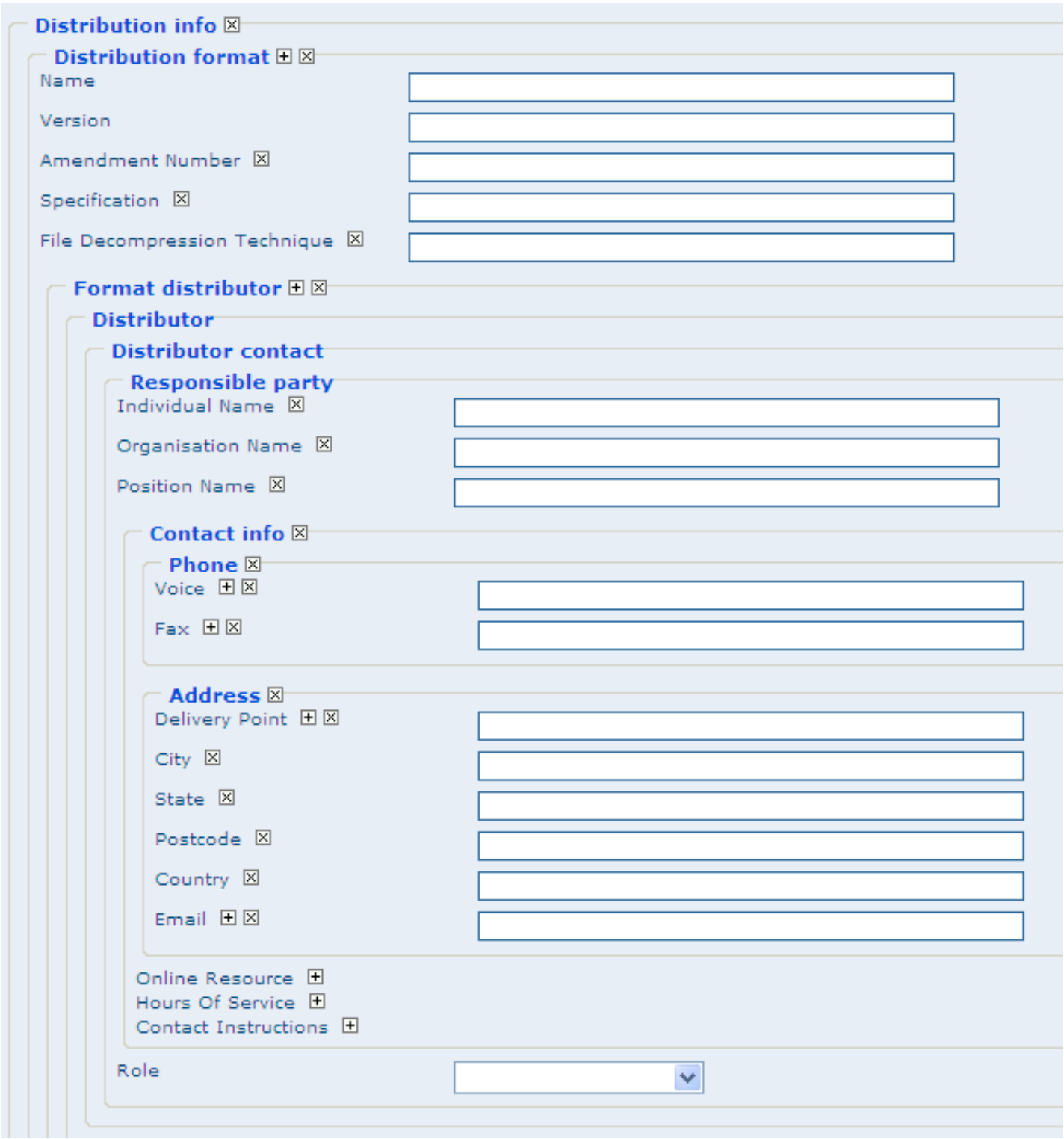
Information about the distributor and options for obtaining the resource. In many cases the resource is a data file or related file, which can be downloaded directly from the MEST via a link in this section.

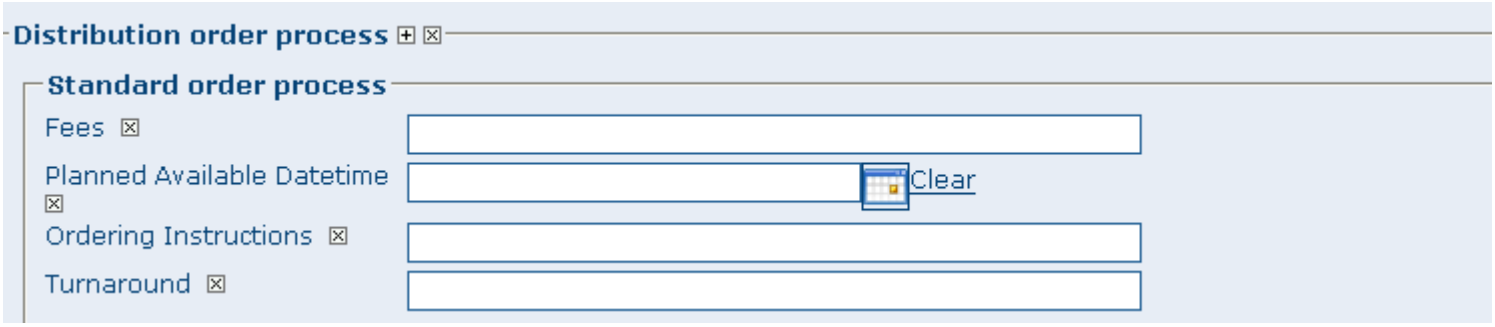
20. Select **Distribution** from the **By Group** list on the left hand side of the screen. A new metadata form based on the selected template will be displayed to complete. Complete the relevant elements and fields within **Distribution**.

Distribution format Information about the format used by the distributor.		
Name	**M**	**Name of the resource format.** *Examples* – • Microsoft Excel; • Microsoft Office Document Imaging; • Adobe Reader 8.
Version	**M**	**Version of the format (date, Number, Etc.)** *Examples* – • 2007; • 11.0; • v.8.1.2.

**** Remaining fields within Distribution format are currently not utilised by IMAS.**

21. Expand the **Distributor** field block. Complete the required fields.





Distributor contact		
Responsible Party		**Party responsible for distributing the resource.** This field is currently not utilised by IMAS. Format - List current contact information. *It may not be necessary to fill out all field blocks within this element. Refer to Appendix 1 for Contact information summary. (Appendix 1: Contact details) See Point of contact for a list of definitions describing all fields within contact details (Point of contact).*

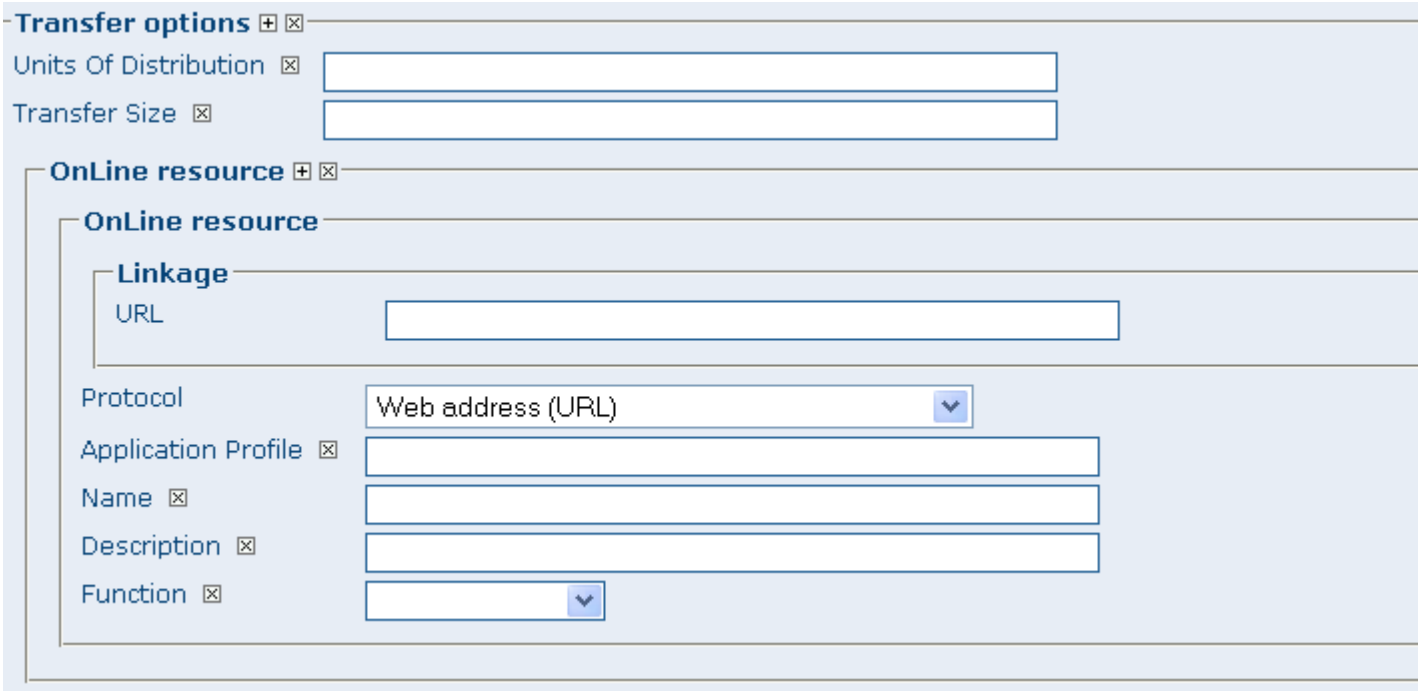
**** Remaining fields within Distributor contact are currently not utilised by IMAS.**

Transfer options Provides information about technical means and media by which the resource is obtained from the distributor.		
Units of Distribution		This field is currently not utilised by IMAS.
Transfer Size		This field is currently not utilised by IMAS.

Online resource
This is the location where data files, other files, and online links are uploaded to the metadata record. This section can be expanded for each file/resource for upload by selecting the [+] symbol.

Instructions on how to upload a file are addressed in Section **5.4 Upload File(s)**.

**** Remaining fields within Transfer Options are currently not utilised by IMAS.**



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5.2.2.8. Data quality

Used to describe a number of aspects about the resource such as sampling equipment (collection hardware), methodology, precision and resolution. All of these aspects can be described in a single occurrence of **Data quality info** or in multiple occurrences by selecting the [+] symbol.

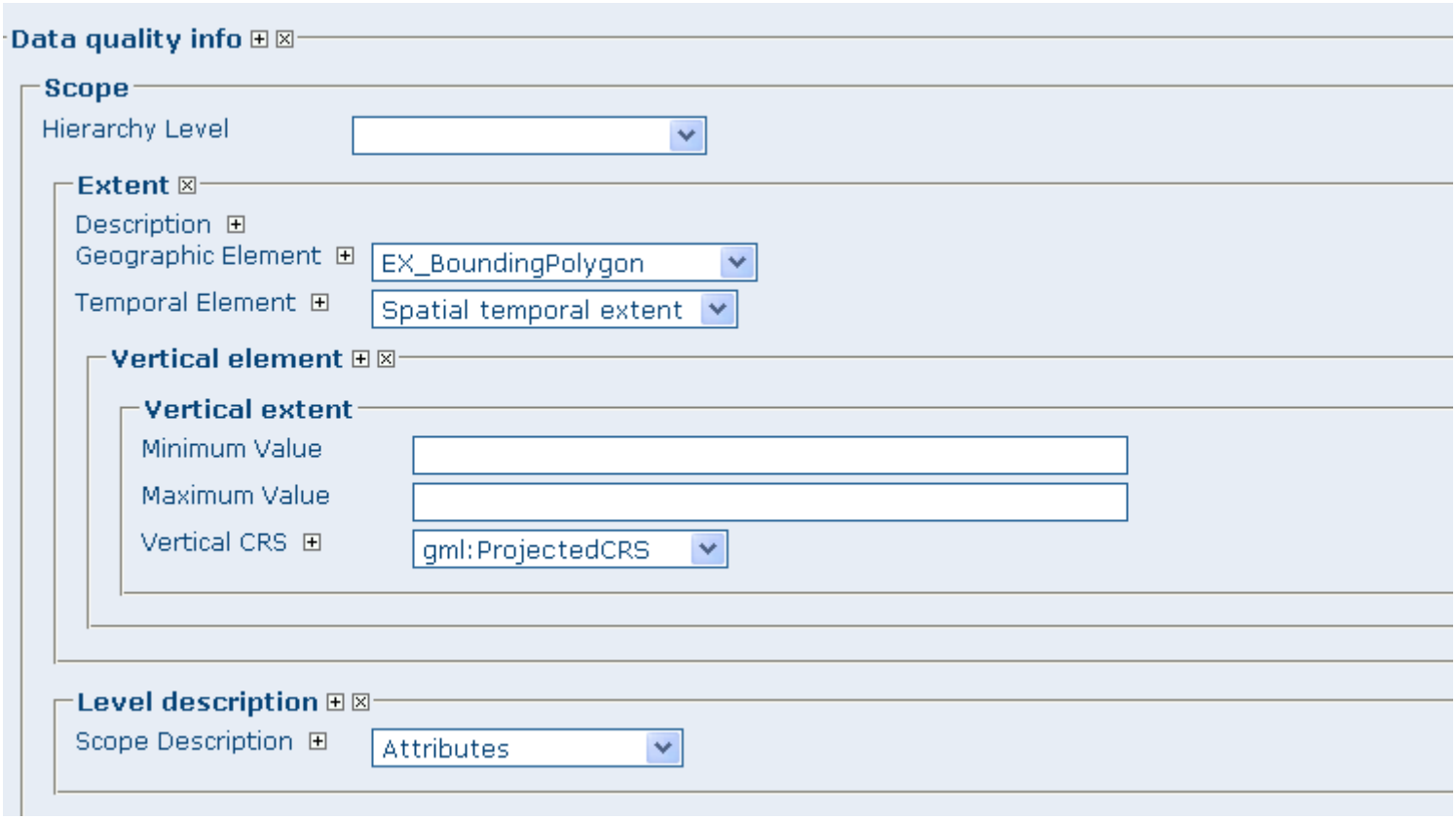
The use of this section will largely depend on the type of resource you are describing. For experimental data, it is recommended that you have at least two occurrences of this element:

- the first to describe the collection hardware and
- the second to describe the dataset more generally.

22. Select **Data quality** from the **By Group** list on the left hand side of the screen. A new metadata form based on the selected template will be displayed to complete. Complete the relevant elements and fields within **Data quality**.

Unless you are trying to describe Geospatial (GIS) data or data collected by a complicated sensor or instrument, you really need only complete the field blocks “Scope - Hierarchy level”, “Level description” and “Lineage statement” within ‘Data Quality Information’.

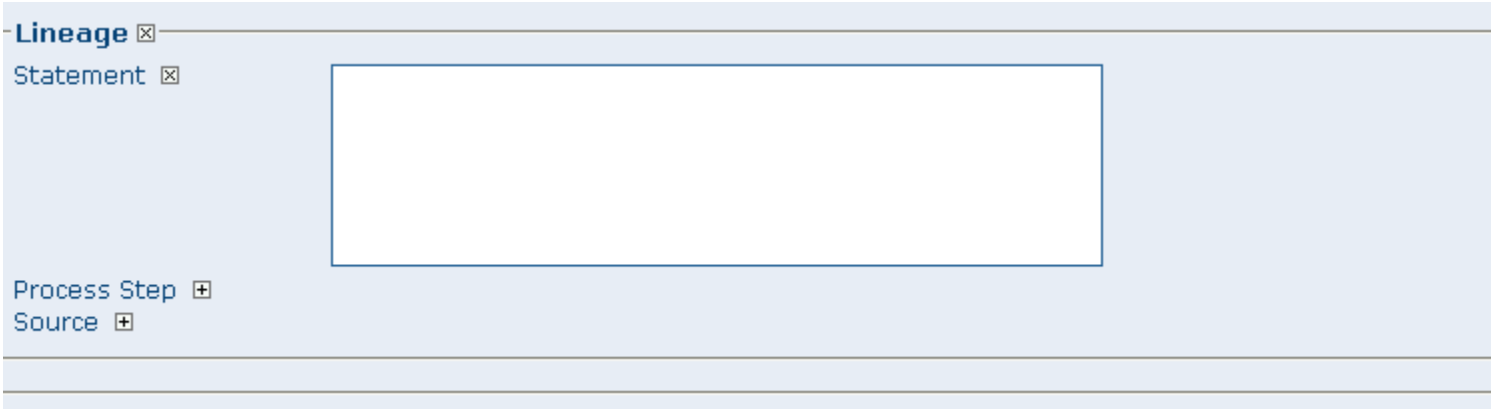
Data quality info Provides overall assessment of quality of the resource.		
Hierarchy Level		**The specific data to which the data quality information applies.** Categorises the resource being described. Format – Values are selected from a controlled codelist.
Extent	**C**	**Information about the spatial, vertical and temporal extent of the data specified by the scope.** This field is currently not utilised by IMAS.
Level description	**C**	**Detailed description about the level of the data specified by the scope "Hierarchy Level".** Format - Values are selected from a controlled codelist. Obligation – Must be completed (for the record to validate), if you indicate that the scope hierarchy level is other than a "dataset" or "series".



Lineage Statement	**C**	**General explanation of the data producer's knowledge about the lineage of a dataset.** Presents a history of how the resource was derived and is intended to provide a statement regarding the nature and quality of the resource. Can include; • Details on sampling, methodologies, precision, resolution, • The equipment and software used, • A description of the data. *Examples –* • The Territorial Sea Baseline (TSB) data was originally derived from the AUSLIG 1:100:000 scale coastline data supplemented with coastal aerial photography in some areas. Since 1994 the data has been extensively validated and revised using the best available data from AUSLIG, the RAN Hydrographic Office and all State and Territory mapping agencies. Satellite imagery and recent aerial photography were also used. • Roughened black Perspex plates (110 x 110 x 15 mm) were used to establish sessile invertebrate assemblages. Square cages (130 mm x 130 mm x 150 mm height) were constructed using either 10 mm mesh plastic Gutter Guard TM or 2 mm mesh flyscreen. Unlike the Gutter Guard TM, the flyscreen was not rigid so an internal frame was built with the Gutter Guard TM which was then completely covered with the 2 mm mesh flyscreen. Partial cages had half of the roof and half of two side walls removed to allow predators access to plates whilst leaving as much of the cage intact as possible. Species identification and counts were made using a binocular dissecting microscope. Obligation – Must if exist if quality scope is "dataset" or "series".

**** Remaining fields within Data quality are currently not utilised by IMAS.**

The actual data quality statement is entered in **Lineage statement**. If you would like to describe the resource with a single occurrence of "Data Quality Info", select either "dataset" or "nonGeographicDataset" as the **Hierarchy level** under Scope.



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5.2.2.9. App. Schema

This Group is not utilised by IMAS.

5.2.2.10. Catalog

This Group is not utilised by IMAS.

5.2.2.11. Content Info

This Group is not utilised by IMAS.

5.2.2.12. Ext. Info

This Group is not utilised by IMAS.

5.2.3. Validate the Record

A metadata record will be valid when –

- All mandatory fields are complete;
- All conditional requirements are met;
- Constrained fields contain appropriate content.

See section **5.1.2 Field Obligations** for information about mandatory and conditional fields.

Constrained fields require specified content or format. The three types of constrained fields within the MEST metadata records are –

- Numerical fields;
- Fields with drop-down codelists;
- Dates.

The MEST will only test if the metadata conforms to the selected schema, it will not validate the content of unconstrained fields (e.g. spelling).

Validation is a two step process, first the MEST tests if all mandatory fields have been completed and that all constrained fields have appropriate content, it then uses a schematron to test whether conditional requirements have been met.

It will not use the schematron until the record passes the first test.

Validation Step 1
Mandatory fields are complete and constrained fields contain appropriate content.

Select the **Check** button. If the metadata passes this first test, the following message will display:

"*Validation against schema definitions succeeded*"

If the metadata doesn't pass this test, a list of the errors in the metadata will be provided. We are currently developing the error messages that describe non-valid metadata records. If you receive a message that you do not understand, please contact helpdesk (see **1.1.3 Feedback**).

Note - During validation and/or viewing of the metadata record, fields where information has not been entered during creation of the record will not be visible. The absence of content in a field may affect the validation process.

Error Identification Table
This error identification table shows the error message that may appear, the field that is affected by the error, the field block(s) where the relevant field can be located, and the solution that should remove the error. To save space, the field blocks listed in the column below that are within the Identification > Data Identification (MCP) field block - as shown when using the **By Profile** view **MCP All -** have had 'Identification > Data Identification (MCP)' removed from the **Field Block** column.

refers to the error number, which changes from record to record.

Validation Error	Field affected	Field Block	Solution

ERROR(#) org.xml.sax.SAXParseException: cvc-datatype-valid.1.2.1: '' is not a valid value for 'dateTime'. (Element: gco:DateTime with parent element: gmd:date)	Date Type, Date	Date	Select calendar icon, select date, select option from **Date Type** list
ERROR(#) org.xml.sax.SAXParseException: cvc-type.3.1.3: The value '' of element 'gco:DateTime' is not valid. (Element: gco:DateTime with parent element: gmd:date)	Date Type, Date	Date	Select calendar icon, select date, select option from **Date Type** list
ERROR(#) org.xml.sax.SAXParseException: cvc-datatype-valid.1.2.1: '' is not a valid value for 'dateTime'. (Element: gco:DateTime with parent element: gmd:date)	Date Type, Date	Descriptive keywords > Keywords > Thesaurus name > Date	Select calendar icon, select date, select option from **Date Type** list
ERROR(#) org.xml.sax.SAXParseException: cvc-type.3.1.3: The value '' of element 'gco:DateTime' is not valid. (Element: gco:DateTime with parent element: gmd:date)	Date Type, Date	Descriptive keywords > Keywords > Thesaurus name > Date	Select calendar icon, select date, select option from **Date Type** list
ERROR(#) org.xml.sax.SAXParseException: cvc-datatype-valid.1.2.2: '' is not a valid value of list type 'Date_Type'. (Element: gco:Date with parent element: gmd:editionDate)	Edition Date	Descriptive keywords > Keywords > Thesaurus name	Select calendar icon, select date
ERROR(#) org.xml.sax.SAXParseException: cvc-type.3.1.3: The value '' of element 'gco:Date' is not valid. (Element: gco:Date with parent element: gmd:editionDate)	Edition Date	Descriptive keywords > Keywords > Thesaurus name	Select calendar icon, select date
ERROR(#) org.xml.sax.SAXParseException: cvc-complex-type.2.4.a: Invalid content was found starting with element 'gmd:dateType'. One of '{"http://www.isotc211.org/2005/gmd":date}' is expected. (Element: gmd:dateType with parent element: gmd:CI_Date)	Date Type, Date	Descriptive keywords > Keywords > Thesaurus name > Identifier > RS Identifier > Authority > Date	Select item from **Date Type** list, select option from **Date** list, select the plus **[+]** button adjacent to **Date**, select on the

			calendar icon, select a date (and time).
ERROR(#) org.xml.sax.SAXParseException: cvc-complex-type.2.4.a: Invalid content was found starting with element 'gmd:dateType'. One of '{"http://www.isotc211.org/2005/gmd":date}' is expected. (Element: gmd:dateType with parent element: gmd:CI_Date)	Date Type, Date	Descriptive keywords > Keywords > Thesaurus name > Identifier > Identifier > Authority > Date	Select an item from the **Date** drop-down list, press the adjacent plus **[+]** button
ERROR(#) org.xml.sax.SAXParseException: cvc-datatype-valid.1.2.2: '' is not a valid value of list type 'Date_Type'. (Element: gco:Date with parent element: gmd:date)	Date Type, Date	Descriptive keywords > Keywords > Identifier > Identifier > Authority > Date	Select the calendar icon, pick a date
ERROR(#) org.xml.sax.SAXParseException: cvc-type.3.1.3: The value '' of element 'gco:Date' is not valid. (Element: gco:Date with parent element: gmd:date)	Date Type, Date	Descriptive keywords > Keywords > Identifier > Identifier > Authority > Date	Select the calendar icon, pick a date
ERROR(#) org.xml.sax.SAXParseException: cvc-enumeration-valid: Value '' is not facet-valid with respect to enumeration '[farming, biota, boundaries, climatologyMeteorologyAtmosphere, economy, elevation, environment, geoscientificInformation, health, imageryBaseMapsEarthCover, intelligenceMilitary, inlandWaters, location, oceans, planningCadastre, society, structure, transportation, utilitiesCommunication]'. It must be a value from the enumeration. (Element: gmd:MD_TopicCategoryCode with parent element: gmd:topicCategory)	Topic Category Code	Topic category	Press the plus **[+]** icon, press the close **[X]** icon on the field block missing a field, select a topic from the list (example: oceans)
ERROR(#) org.xml.sax.SAXParseException: cvc-type.3.1.3: The value '' of element 'gmd:MD_TopicCategoryCode' is not valid. (Element: gmd:MD_TopicCategoryCode with parent element: gmd:topicCategory)	Topic Category Code	Topic category	Press the plus **[+]** icon, press the close **[X]** icon on the field block missing a

			field, select a topic from the list (example: oceans)
ERROR(#) org.xml.sax.SAXParseException: cvc-datatype-valid.1.2.1: '' is not a valid value for 'boolean'. (Element: gco:Boolean with parent element: gmd:extentTypeCode)	Extent Type Code	Extent > Geographic element > EX_BoundingPolygon > Extent type code	Enter either 0 or 1, otherwise remove the field by clicking close **[X]**
ERROR(#) org.xml.sax.SAXParseException: cvc-type.3.1.3: The value '' of element 'gco:Boolean' is not valid. (Element: gco:Boolean with parent element: gmd:extentTypeCode)	Extent Type Code	Extent > Geographic element > EX_BoundingPolygon > Extent type code	Enter either 0 or 1, otherwise remove the field by clicking close **[X]**
ERROR(#) org.xml.sax.SAXParseException: cvc-complex-type.2.4.b: The content of element 'gmd:EX_BoundingPolygon' is not complete. One of '{"http://www.isotc211.org/2005/gmd":polygon}' is expected. (Element: gmd:EX_BoundingPolygon with parent element: gmd:geographicElement)	Polygon	Extent > Geographic element > EX_BoundingPolygon	Select an item from the list then click the adjacent plus **[+]** button
ERROR(#) org.xml.sax.SAXParseException: cvc-complex-type.2.4.b: The content of element 'gml:Point' is not complete. One of '{"http://www.opengis.net/gml":metaDataProperty, "http://www.opengis.net/gml":description, "http://www.opengis.net/gml":descriptionReference, "http://www.opengis.net/gml":identifier, "http://www.opengis.net/gml":name, "http://www.opengis.net/gml":pos, "http://www.opengis.net/gml":coordinates}' is expected. (Element: gml:Point with parent element: gmd:polygon)	gml: metaDataProperty gml: description gml: descriptionReference gml: identifier gml:name	Extent > Geographic element > EX_BoundingPolygon > Polygon > Point	Select the plus **[+]** button next to the item to be expanded, then fill in the field.
ERROR(#) org.xml.sax.SAXParseException: cvc-datatype-valid.1.2.1: '' is not a valid value for 'decimal'. (Element: gco:Decimal with parent element: gmd:westBoundLongitude)	West bound latitude	Extent > Geographic element > Geographic bounding box	Either enter a coordinate in the field, or select from the list

ERROR(#) org.xml.sax.SAXParseException: cvc-type.3.1.3: The value '' of element 'gco:Decimal' is not valid. (Element: gco:Decimal with parent element: gmd:westBoundLongitude)	West bound latitude	Extent > Geographic element > Geographic bounding box	Either enter a coordinate in the field, or select from the list
ERROR(#) org.xml.sax.SAXParseException: cvc-datatype-valid.1.2.1: '' is not a valid value for 'decimal'. (Element: gco:Decimal with parent element: gmd:eastBoundLongitude)	East bound latitude	Extent > Geographic element > Geographic bounding box	Either enter a coordinate in the field, or select from the list
ERROR(#) org.xml.sax.SAXParseException: cvc-type.3.1.3: The value '' of element 'gco:Decimal' is not valid. (Element: gco:Decimal with parent element: gmd:eastBoundLongitude)	East bound latitude	Extent > Geographic element > Geographic bounding box	Either enter a coordinate in the field, or select from the list
ERROR(#) org.xml.sax.SAXParseException: cvc-datatype-valid.1.2.1: '' is not a valid value for 'decimal'. (Element: gco:Decimal with parent element: gmd:southBoundLatitude)	South bound latitude	Extent > Geographic element > Geographic bounding box	Either enter a coordinate in the field, or select from list
ERROR(#) org.xml.sax.SAXParseException: cvc-type.3.1.3: The value '' of element 'gco:Decimal' is not valid. (Element: gco:Decimal with parent element: gmd:southBoundLatitude)	South bound latitude	Extent > Geographic element > Geographic bounding box	Either enter a coordinate in the field, or select from the list
ERROR(#) org.xml.sax.SAXParseException: cvc-datatype-valid.1.2.1: '' is not a valid value for 'decimal'. (Element: gco:Decimal with parent element: gmd:northBoundLatitude)	North bound latitude	Extent > Geographic element > Geographic bounding box	Either enter a coordinate in the field, or select from the list
ERROR(#) org.xml.sax.SAXParseException: cvc-type.3.1.3: The value '' of element 'gco:Decimal' is not valid. (Element: gco:Decimal with parent element: gmd:northBoundLatitude)	North bound latitude	Extent > Geographic element > Geographic bounding box	Either enter a coordinate in the field, or select from the list
ERROR(#) org.xml.sax.SAXParseException: cvc-datatype-valid.1.2.1: '' is not a valid value for 'boolean'. (Element: gco:Boolean with parent element: gmd:extentTypeCode)	Extent Type code	Extent > Geographic element > Geographic description	Enter either 0 or 1, otherwise remove the field by clicking close **[X]**
ERROR(#)	Extent Type	Extent >	Enter either

org.xml.sax.SAXParseException: cvc-type.3.1.3: The value '' of element 'gco:Boolean' is not valid. (Element: gco:Boolean with parent element: gmd:extentTypeCode)	code	Geographic element > Geographic description	0 or 1, otherwise remove the field by clicking close **[X]**
ERROR(#) org.xml.sax.SAXParseException: cvc-complex-type.2.4.b: The content of element 'gmd:EX_GeographicDescription' is not complete. One of '{"http://www.isotc211.org/2005/gmd":geographicIdentifier}' is expected. (Element: gmd:EX_GeographicDescription with parent element: gmd:geographicElement)	Geographic Identifier	Extent > Geographic element > Geographic description	Select an option from the drop-down list and then press the plus **[+]** button. Then fill the newly displayed fields.
ERROR(#) org.xml.sax.SAXParseException: cvc-complex-type.2.4.b: The content of element 'gmd:EX_SpatialTemporalExtent' is not complete. One of '{"http://www.isotc211.org/2005/gmd":extent}' is expected. (Element: gmd:EX_SpatialTemporalExtent with parent element: gmd:temporalElement)	Extent, Spatial Extent	Extent > Temporal element > Spatial temporal extent	Select plus **[+]** on both field names, fill in necessary fields
ERROR(#) org.xml.sax.SAXParseException: cvc-datatype-valid.1.2.1: '' is not a valid value for 'double'. (Element: gco:Real with parent element: gmd:minimumValue)	Minimum Value	Extent > Vertical element > Vertical extent	Enter a numerical value in this field
ERROR(#) org.xml.sax.SAXParseException: cvc-type.3.1.3: The value '' of element 'gco:Real' is not valid. (Element: gco:Real with parent element: gmd:minimumValue)	Minimum Value	Extent > Vertical element > Vertical extent	Enter a numerical value in this field
ERROR(#) org.xml.sax.SAXParseException: cvc-datatype-valid.1.2.1: '' is not a valid value for 'double'. (Element: gco:Real with parent element: gmd:maximumValue)	Maximum Value	Extent > Vertical element > Vertical extent	Enter a numerical value in this field
ERROR(#) org.xml.sax.SAXParseException: cvc-type.3.1.3: The value '' of element 'gco:Real' is not valid. (Element: gco:Real with parent element: gmd:maximumValue)	Maximum Value	Extent > Vertical element > Vertical extent	Enter a numerical value in this field

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Troubleshooting

How come clicking on a calendar icon does not bring up the calendar?

Click **Save and Close** to go to the view record screen, click **Edit** to return to the edit screen, and then try clicking on the calendar icon again.

What happens if I have an error that is not listed in the table above?

If a message displays that is not understood, please contact helpdesk (see **1.1.3 Feedback**).

If you would prefer to analyse the error yourself, please try the following:

Analyse the part of the error that says (Element: ____ with parent element: _____).

Back on the edit record screen, look for the symbols, and see if a field name or field block is similar to the code in the error. If so, check for:

- empty fields
- drop-down lists that have an option selected, but also have a plus [+] icon indicating a field block needs to be added.

How come I can not find the field (-block) where the error originates?

Check that the **By Profile** view is set to **MCP All** (top left hand corner). Use Ctrl-F to search for the field (-block) name within the browser screen.

The error table above refers to a field name that appears multiple times on the edit screen, I don't know which one to edit?

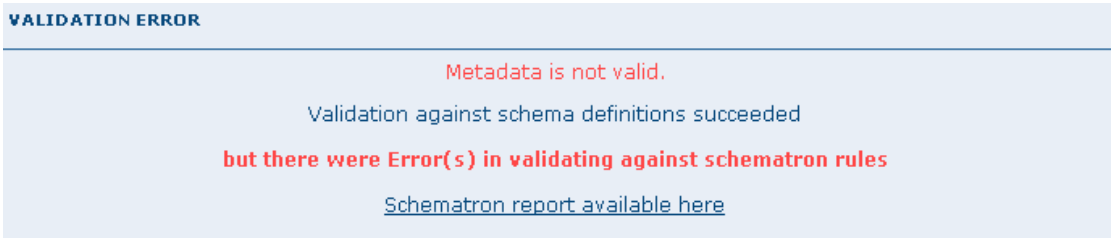
There are often multiple headings with common field block names. To find the right one quickly, search the web page by using Ctrl-F. Look for either a field name with a symbol next to it, or alternatively a field name within a field-block displaying the symbol.

Validation Step 2
Schematron test of conditional requirements.

Once the metadata record has passed the first test, the MEST will automatically run the schematron. If the metadata passes this second test the following message will display:

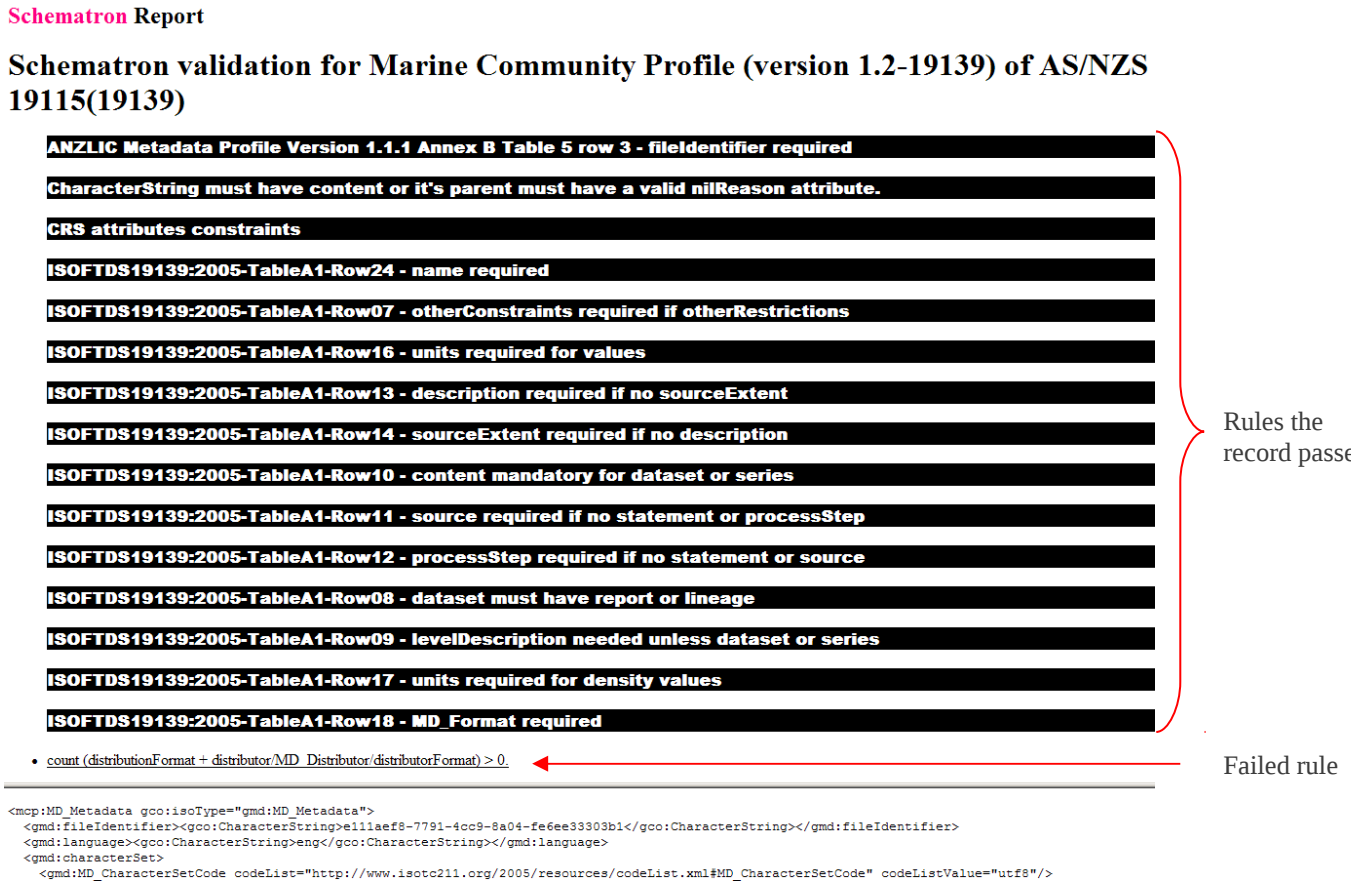
"*Validation against schematron rules succeeded*"

If the metadata does not pass the schematron test, the below message will be shown.


VALIDATION ERROR
Metadata is not valid.
Validation against schema definitions succeeded
but there were Error(s) in validating against schematron rules
Schematron report available here

Click the phrase "Schematron report available here" to find out where the error occurred. This section of the MEST is not particularly user-friendly, if there are difficulties interpreting the schematron output either contact helpdesk (see **1.1.3 Feedback**) or go back to the record in edit mode and look for elements containing the symbol, .

The output of the schematron will look like the figure below. Each row is a rule tested by the schematron. If the metadata conformed to the rule, the text will be white on a black background. If the metadata did not conform to the rule the text will not have a black background. Once a rule that failed has been identified, return to the metadata record and repair it, then select the **Check** button again.



Schematron Error Identification Table

This error identification table shows the error message that may appear, the field that is affected by the error, the field block(s) that the field can be found in, and the solution that should remove the error. To save space, the field blocks listed in the column below that are within the Identification > Data Identification (MCP) field block - as shown when using the **By Profile** view **MCP All** - have had '**Identification** > **Data Identification (MCP)**' removed from the **Field Block** column.

Schematron Error	Field affected	Field Block	Solution
ANZLIC Metadata Profile Version 1.1.1 Annex B Table 5 row 3 - fileIdentifier required[*]			
CharacterString must have content or it's parent must have a valid nilReason attribute.Error: Reference source not found			
CRS attributes constraintsError: Reference source not found			
ISOFTDS19139:2005-TableA1-Row24 - name requiredError: Reference source not found			
ISOFTDS19139:2005-TableA1-Row07 - otherConstraints required if otherRestrictions			
otherConstraints: documented if accessConstraints or useConstraints = "otherRestrictions."	Access Constraints, Other constrsaints	Resource Constraints, Legal constraints	Expand **[+]** the **Other constraints** field and fill

[*] This error category does not contain errors.

			in.
otherConstraints: documented if accessConstraints or useConstraints = "otherRestrictions."	Use Constraints, Other constrsaints	Resource Constraints, Legal constraints	Expand **[+]** the **Other constraints** field and fill in.
ISOFTDS19139:2005-TableA1-Row16 - units required for valuesError: Reference source not found			
ISOFTDS19139:2005-TableA1-Row13 - description required if no sourceExtent			
"description" is mandatory if "sourceExtent" is not documented.	Source	Lineage > Lineage > [Process Step > Process Step >] Source	Fill in **description** field OR fields in **Source Extent** block
ISOFTDS19139:2005-TableA1-Row14 - sourceExtent required if no description			
"description" is mandatory if "sourceExtent" is not documented.	Source	Lineage > Lineage > [Process Step > Process Step >] Source	Fill in **description** field OR fields in **Source Extent** block
ISOFTDS19139:2005-TableA1-Row10 - content mandatory for dataset or series			
If(count(source) + count(processStep) =0) and (DQ_DataQuality.scope.level = 'dataset' or 'series') then statement is mandatory.	Statement, Process Step, Source.	Data quality info > Data quality > Lineage > Lineage	Expand and fill in field/block for **Statement, Process Step**, or **Source**.
ISOFTDS19139:2005-TableA1-Row11 - source required if no statement or processStep			
"source" role is mandatory if LI_Lineage.statement and "processStep" role are not documented.	Statement, Process Step, Source.	Data quality info > Data quality > Lineage > Lineage	Expand and fill in field/block for **Statement, Process Step**, or **Source**.
ISOFTDS19139:2005-TableA1-Row12 - processStep required if no statement or source			
"processStep" role is mandatory if LI_Lineage.statement and "source" role are not documented.	Statement, Process Step, Source.	Data quality info > Data quality > Lineage > Lineage	Expand and fill in field/block for **Statement, Process Step**, or

			Source.
ISOFTDS19139:2005-TableA1-Row08 - dataset must have report or lineage			
"report" or "lineage" role is mandatory if scope.DQ_Scope.level = 'dataset'.	Report, Lineage	Data quality info > Data quality	Expand and fill in field/block for **Report** or **Lineage**
ISOFTDS19139:2005-TableA1-Row09 - levelDescription needed unless dataset or series			
"levelDescription" is mandatory if "level" notEqual 'dataset' or 'series'.	Hierarchy level, Level Description	Data quality info > Data quality > Scope > Scope	Select an option from the **Level Description** drop-down list and click plus **[+]**, fill in the field
ISOFTDS19139:2005-TableA1-Row17 - units required for density valuesError: Reference source not found			
ISOFTDS19139:2005-TableA1-Row18 - MD_Format required			
count (distributionFormat + distributor/MD_Distributor/distributorFormat) > 0.	Distribution format, Distributor, [Transfer options]	Distribution info > Distribution	Expand **[+]** the **Distribution format** and **Distributor** field blocks
ISOFTDS19139:2005-TableA1-Row23 - element required			
count(description + geographicElement + temporalElement + verticalElement) > 0.	Extent	Data quality info > Data quality > Scope > Scope > Extent	Fill in **description** field
ISOFTDS19139:2005-TableA1-Row04 - dataset must have extentError: Reference source not found			
ISOFTDS19139:2005-TableA1-Row05 - dataset or series must have topicCategoryError: Reference source not found			
ISOFTDS19139:2005-TableA1-Row06 - either aggregateDataSetName or aggregateDataSetIdentifier must be documentedError: Reference source not found			
ISOFTDS19139:2005-TableA1-Row01 - language indicationError: Reference source not found			
ISOFTDS19139:2005-TableA1-Row02 - character set indicationError: Reference source not found			
ISOFTDS19139:2005-TableA1-Row19 - detail required unless simple termError: Reference source not found			
ISOFTDS19139:2005-TableA1-Row20 - conditionError: Reference source not found			
ISOFTDS19139:2005-TableA1-Row21 - domainCodeError: Reference source not found			
ISOFTDS19139:2005-TableA1-Row22 - shortNameError: Reference source not found			

ISOFTDS19139:2005-TableA1-Row15 - checkPointDescription required if availableError: Reference source not found			
hierarchy level nameError: Reference source not found			
gmd:MD_Metadata/gmd:dateStamp requiredError: Reference source not found			
gmd:identificationInfo/mcp:MD_DataIdentification requires citation, abstract, credit, status, pointOfContact			
MD_(Data)Identification is missing citation.	Citation	Data Identification (MCP)	Fill in **Citation** area
MD_(Data)Identification is missing abstract.	Abstract	Data Identification (MCP)	Fill in **Abstract** field
MD_(Data)Identification is missing pointOfContact.	Point of Contact	Data Identification (MCP)	Click the plus **[+]** button
if resourceMaintenance then must have maintenanceAndUpdateFrequency			
maintenanceAndUpdateFrequency is mandatory if resourceMaintenance is documented.	Maintenance and update frequency	Data Identification (MCP) > Resource maintenance > Maintenance information	Select an option from the drop-down list
dataset must have temporal extent			
MD_Metadata/hierarchyLevel = "dataset" (i.e. the default value of this property on the parent) implies count (extent//temporalElement/EX_TemporalExtent) >=1.	Temporal element	Extent	Select an option from **Temporal element** and click the plus button **[+]**. Fill in the newly displayed fields.

Schematron Troubleshooting

How come clicking on a calendar icon does not bring up the calendar?

Click **Save and Close** to go to the view record screen, click **Edit** to return to the edit screen, and then try clicking on the calendar icon again.

What happens if I have an error that is not listed in the table above?

If a message displays that is not understood, please contact helpdesk (see **1.1.3 Feedback**).

If you would prefer to analyse the error yourself, try the following:

Analyse the part of the error that says (Element: ____ with parent element: _____).

Back on the edit record screen, look for the symbols, and see if a field name or field block is similar to the code in the error. If so, check for:

- empty fields
- drop-down lists that have an option selected, but also have a plus **[+]** icon indicating a field block needs to be added

How come I can not find the field (or element) where the error originates?

Check that the **By Profile** view is set to **MCP All** (top left hand corner). Use Ctrl-F to search for the field (-block) name within the browser screen.

The error table above refers to a field name that appears multiple times on the edit screen, I don't know which one to edit?

There are often multiple headings with common field block names. To find the right one quickly, search the page by using Ctrl-F. Look for either a field name with a symbol next to it, or alternatively a field name within a field-block displaying the symbol.

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5.3. Adding Thumbnail Images

A thumbnail is a graphic overview of the resource.

A large and small thumbnail image may be uploaded to illustrate the content of the research, for example a map or a photo (users will be able to access the large thumbnail by clicking on the small thumbnail). A small thumbnail will be displayed in search results.

Thumbnail images can only be inserted during the creation or editing the metadata record.

1. Is the metadata record being created?

   No Continue (to get to the editing menu)

   Yes Go to **5.3 below**

2. Find the record from one of the SEARCH options.
3. Open the record.
4. Select the **Edit** button.
5. Select the **Thumbnails** button. The following Thumbnail management screen is displayed:

File Types

GIF, PNG and JPEG images can be used as input for the thumbnails.

To use the same image for the small and large thumbnails -

6. Select the **Browse** button for the **Large thumbnail** (to locate the image file).
7. A pop up window will appear to browse files on the computer.
8. Select the required file by double-clicking on it.
9. Select the **Add** button to load both images simultaneously onto the record.

Go to **5.3 below**

To use different images –

10. Select the **Browse** button for the **Small thumbnail** (to locate the image file).
11. A pop up window will appear to browse files on the computer.
12. Select the required file by double-clicking on it.
13. Select the **Add** button.
14. Select the **Browse** button for the **Large thumbnail** (to locate a different image file).
15. A pop up window will appear to browse files on the computer.
16. Select the required file by double-clicking on it.
17. Select the **Add** button.
18. Select the **Back to editing** button to return to the record view.
19. Select the **Save** button.

To make changes, return to the thumbnail management view and click on both of the **Delete** buttons to reset the images.

Image Size and Settings

The default settings have been set to the recommended size but it is important to ensure that the thumbnails are scaled to display the image(s) to their best effect and clarity.

The size of the thumbnails can be scaled up or down by changing the pixel size. Images can be scaled either vertically or horizontally to a fixed number of pixels.

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5.4. Upload File(s)

Once the metadata record is complete it is possible to upload a dataset and create a link between the data and related description. Any documentation that can assist with the interpretation of the data should be uploaded, including related reports, detailed descriptions, base data used to create the dataset specified and/or other relevant information.

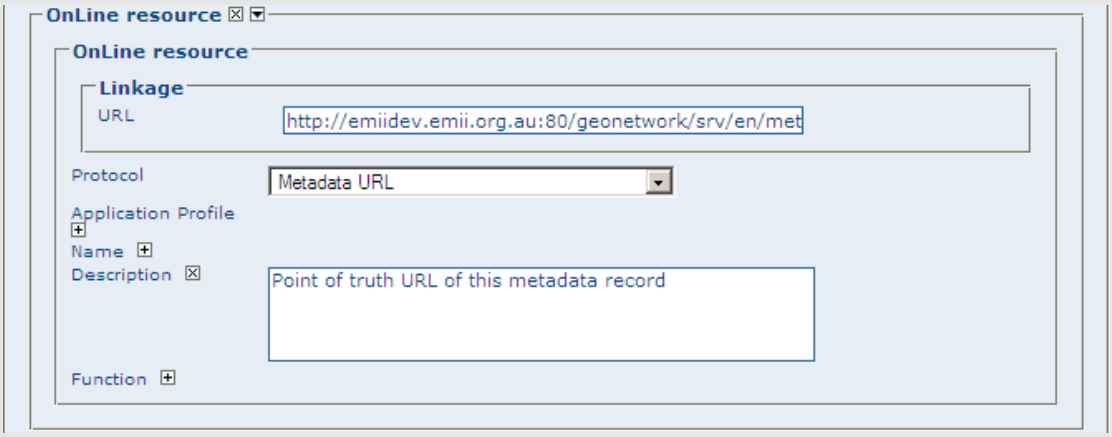
Data can be uploaded directly into the MEST or a URL to link to the data stored in another location. Uploading data or providing URL details is done by completing the **Distribution** section of the metadata record, available from the left menu.

Three (3) field blocks, within the **Distribution** section, must be completed – **Distribution format**, **Distributor** and **Transfer Options**.

Point of Truth URL

If an **OnLine resource** box contains information about a **Point of Truth URL**, do not modify it, but instead add a new **OnLine resource** box (see **5.1.3 RECORD MANAGEMENT** for instructions on how). Any modifications made to this area will be overridden.

The **Point of Truth URL** exists as a way for users to find the original metadata record in situations where the record may have been harvested.



16. Is the metadata record being created?

    No → Continue (to get to the editing menu)

    Yes → Go to 7

17. Find the record from one of the SEARCH options.
18. Open the record.

19. Select the **Edit** button.
20. Select **Distribution** from the **By Group** list on the left hand side of the screen.
21. Enter the format details of the file to be uploaded in the **Name** and **Version** fields (For further information refer to Distribution format).
22. If the **Distributor** element is not already open, open it by selecting the **[+]** (expand) symbol. This field is currently not utilised by IMAS.
23. Enter the name and contact details of the individual and organisation distributing the resource (For further information refer to Distributor contact).
24. If the **OnLine resource** element under **Transfer options** is not already open, open it by selecting the **[+]** symbol.
25. Select the connection **Protocol** for the data from the available codelist. Once a protocol has been selected the **Upload File** button will be available.

Data Protocol

The Protocol for the majority of files will be either **Data File for download** or **Other File for download**.

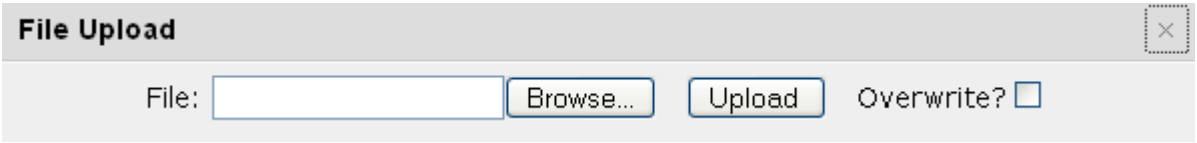
26. Enter the **Description** of the file.

The file **Description** should include the file, size, type and format.

Examples –

- East Gippsland Survey (data file) [100mb][ascii]
- East Gippsland Survey (image loop of lake after flood)[1mb][vdx]
- East Gippsland Survey (documentation on collection rational)[75kb][.doc]

27. Select the **Upload File** button. The following file upload screen is displayed:



What characters are permitted in a file name?

It is recommended that the filename is edited before the upload is started. Letters,

numbers, hyphens and underscores are permitted.

If a file is uploaded that contains prohibited characters in its name, all spaces within the file name are replaced with underscores and the remaining prohibited symbols are stripped from the file name.

28. Select the **Browse** button and navigate to locate the required file.
29. Select the file by either double clicking, or, clicking once and selecting Open.

What kind of file formats can the attachment have?

Files in any format can be uploaded including but not limited to PDF, doc, xls, images, and vector layers can be used as input for the data for download. Large files should be compressed.

30. Select the **Upload** button. The following upload screen is displayed for successful file upload:

31. Close the **File Upload** screen.

Can I rename uploaded files?

Renaming files after they have been uploaded is discouraged. If the filename needs to be changed, edit it locally before uploading the file. Files will not be found if they are renamed after uploading.

32. Select **Save** to ensure all changes are maintained.

What happens if the wrong file is attached?

If an error is made or a replacement file is required, select the remove button to delete the existing file and repeat the file upload process (see **5.4 Upload File(s)**).

Can I update the saved data file with additional file versions?

If working on a continuous dataset, select the overwrite checkbox in the upload window. A file of the same name will not be saved unless the overwrite checkbox is selected.

When downloading files the user will be able to determine that there are previous versions.

To validate that the file has been recorded and available for download see section **4.4** Download Data Set(s).

It will not be possible to download the data file(s) unless **Resource Constraint** information is added.

How are multiple files uploaded?

Consider if multiple files can be uploaded as one unique zip file, i.e. the files have the same data profile, or as multiple separate downloads.

To upload additional files as separate downloads, add a new online resource box by selecting the **[+]** (expand) symbol.

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5.5. Upload URL

1. Is the metadata record being created?

   No Continue (to get to the editing menu)

   Yes Go to **7 below**

2. Find the record from one of the SEARCH options.

3. Open the record.
4. Select the **Edit** button.
5. Select **Distribution** from the **By Group** list on the left hand side of the screen.
6. If the **OnLine resource** element is not already open, open it by selecting the **[+]** (expand) symbol.
7. Select the connection **Protocol** for the data, **Web address (URL)**, from the available codelist.
8. Remove the BlueNet URL from the Linkage **URL** field.
9. Enter the required web address.
10. Enter the **Description** for the file.

When creating external links from the MEST records, please ensure that –

- The resource is freely available,
- The **URL** does not contain or link to any material that could be considered offensive.

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5.6. Assign/Alter Access Privileges

Once a metadata record has been created and saved, the viewing privileges can be adjusted. This is the identification of the work groups access i.e. **Publish**, **Download**, etc. for the particular record.

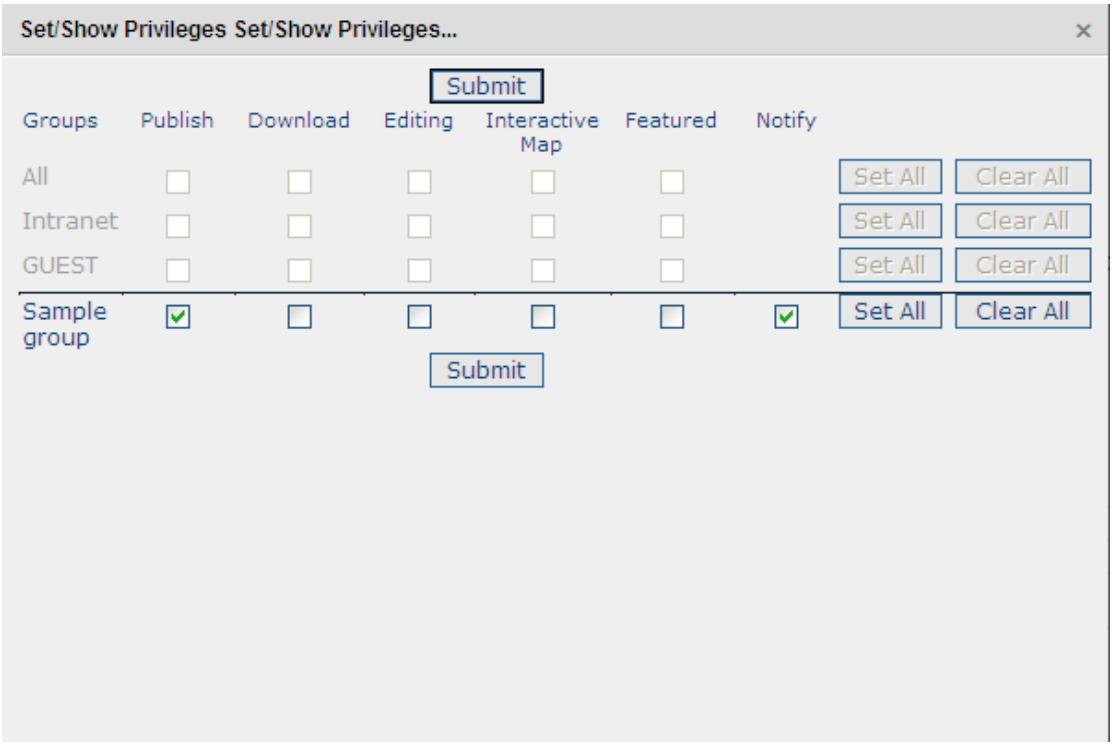
Privileges are assigned on a per group basis. The access to these functions may differ on a per user basis depending on the user profile (i.e. Guest, User, Editor, Admin, etc.).

To assign/alter privileges –

1. Find the record from one of the SEARCH options.

The **Privileges** option is available from the search output or within the metadata record.

2. Select the **Privileges** button. The following screen is displayed:



The following is a brief description of each privilege, to assist with identifying the correct one to assign to which group(s).

Publish – Members of the selected user group can view the record (if searching with matching criteria). These users can not edit the record.

Download – Members of the selected user group can view the record and download any attached data or associated file(s).

Editing – Members of the selected user group will be able to view and edit the metadata record.

Interactive Map – Members of the selected user group can view the record and if a Web Map Server layer is available, use the interactive map.

Featured – Members of the selected user group may see the record on the home page of the MEST. The record is placed in the Features Maps of the home page and it appears there randomly.

Notify – the administrator of the selected user group will be notified whenever the attached files are downloaded.

3. Select the small box next to the privilege to place or remove a checkmark.

Set All and **Clear All** buttons allow all of the checkmarks to be placed or removed at once.

4. Select **Close** window for the **Set/Show Privileges** screen

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5.7. Assigning Categories

A metadata record can be assigned to a category to assist the user in refining their search result. Assigning categories allows a user to identify data and/or metadata records at a more generic level. Category options include; **Applications**, **Audio/Video**, **Case study and best practices**, **Conference proceedings**, **Datasets**, **Directories**, **Interactive resources**, **Maps and graphics**, **Other information resources**, **Photo**.

To assign categories –

1. Find the record from one of the **SEARCH** options.

The Categories option is available from the search output or within the metadata record.

2. Select the **Categories** button:
3. From the **Set/Show** Categories screen, select the option that best describes the resource.
4. Select the **Submit** button.

Search By Category

Assigning a category is optional; however it may increase the chance of the resource being discovered by another user, as users are able to search by these category types via the home page of the MEST. This field is currently not utilised by IMAS.

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5.8. Cloning Records

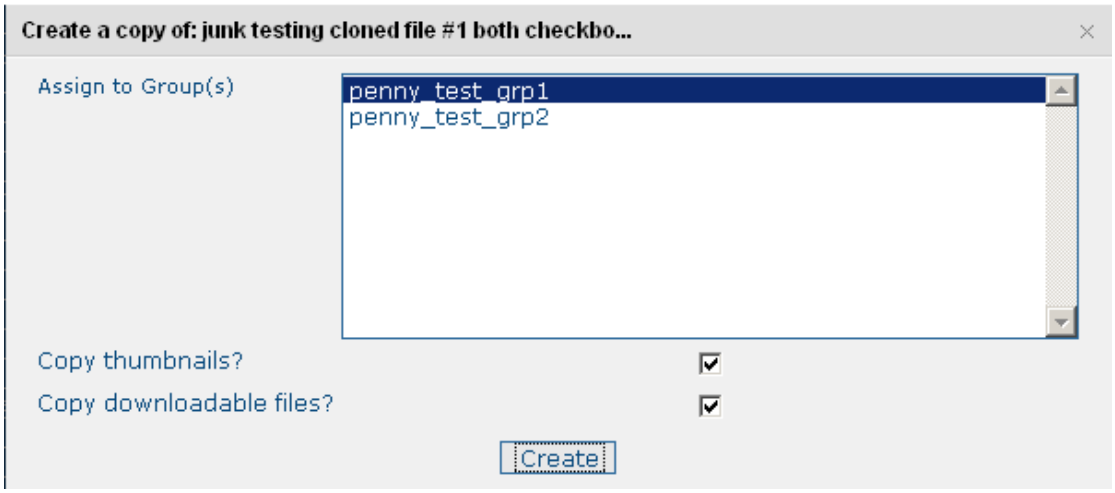
Along with creating records from scratch, it is possible to create a clone of already existing records. Cloning records can be a time saver when there are collections of information that could be reused in multiple records (for example, contact details).

Be careful when cloning records, as some unwanted information could be hidden if the record is not reviewed in **MCP All** view before publishing.

To clone a record –

1. After performing a search (see SEARCH section), select a record.
2. In the view record screen, select the **Create** button at the top of the window.

3. A dialogue box will appear, as shown:



4. Select a group for the record to belong to.

Group Selection

It is advised to select one group only. When multiple groups are selected, only the top group will be saved as the assigned group.

5. If the metadata record contains thumbnails and downloadable data, two checkboxes will display on the screen, providing the option to copy these files across.

Thumbnails and Downloadable Files

By leaving the checkboxes unchecked, references to the file name and other file specifications will still be present in other areas of the record. The file itself will not be copied. It may be necessary to read through the record manually and remove any file references.

6. Select the **Create** button to submit.

By selecting **Cancel** at this point instead of **Save** or **Save and Close**, the record will still exist, with an identical title to the record just cloned. It is safer to save with a retitled record (say with '[DELETE]' in the **Title**) so it is easier to know which record to delete should if it is decided not to clone the record after all.

7. The record will appear in edit mode. Make the desired changes and then select **Save and Close**.

When making changes to the metadata record, ensure characters (letters, words, numbers, etc.) are entered in the **Title** before closing the record. If no title has been entered, the record becomes inaccessible.

If, while making changes to the record, the **Save** button has been selected, be aware that this could stop the calendar pop up for the date fields from appearing. To rectify this, press the **Save and Close** button, and then in the view record screen click **Edit** to return to the edit screen. Make changes to the date fields before pressing the **Save** button to avoid this issue.

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5.9. Edit Metadata Record

It is possible to return to add to or complete an incomplete metadata record at any time, even once it has been made public. The **Edit** option is only available within the record. User record ownership and privileges determines the access to the **Edit** button.

The user must be logged into the MEST to edit a record.

Editing a record will automatically update the **Revision Date** stamp, to the current date and time, within the record.

The Edit option is used to –

- Add additional information,
- Complete an incomplete record,
- Upload new/additional files,
- Delete files.

If in edit mode and viewing the data **By Profile** the content of the fields suppressed from view will not be altered or deleted.

To edit a record –

1. Find the record from one of the SEARCH options.
2. Select the **Edit** button.
3. Once all editing is complete select the **Save and Close** button.

While editing a record it is possible to cancel edits, by selecting the **Cancel** button. This will not delete the record.

Are there limits to how much content I can store in a metadata record?

Yes. A limit applies to the total amount of content that fills the fields and drop-down lists of the form in any edit mode, whether by **MCP All** view, **MCP Core**, **MCP Minimum** or **By Group**.

The character limit is 142,652 – the equivalent of 28,531 words, or 28 pages.

If more than 28 pages worth of content needs to be added, it may be worth splitting the information into an Aggregation set (see Aggregation info for further information on Aggregation sets).

Save record before and during the entering of large amounts of data to prevent loss in the event that the data limit is exceeded.

5.9.1. Editing in XML View

The **XML view** is another way for metadata editors to directly alter the content of metadata records (rather than manually typing information into the elements, **By Group** and **By Profile** options).

Care should be taken when editing XML since the validation schema expects field tags to occur in a certain order and the content of some fields may be fixed by a codelist.

XML editing software can be accessed at http://www.oxygenxml.com/

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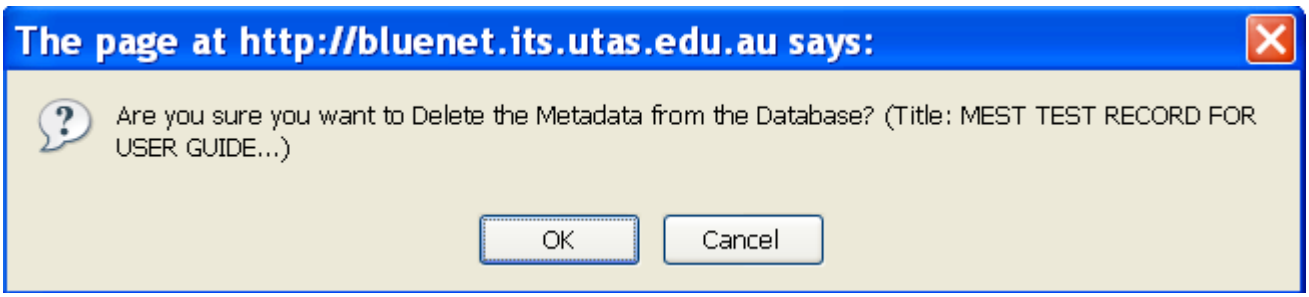
5.10. Delete Metadata Record

The **Delete** option is available from the search output or within the metadata record. User record ownership and privileges determines the access to the **Delete** button.

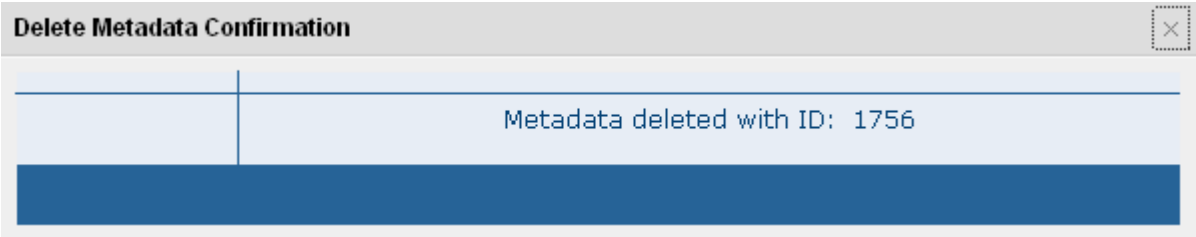
The user must be logged into the MEST to delete a record.

To delete a record –

1. Find the record from one of the SEARCH options.
2. Select the **Delete** button. The following screen is displayed:


The page at http://bluenet.its.utas.edu.au says:
Are you sure you want to Delete the Metadata from the Database? (Title: MEST TEST RECORD FOR USER GUIDE...)
OK
Cancel

3. Select **OK**. The following confirmation is displayed once the record has been deleted:



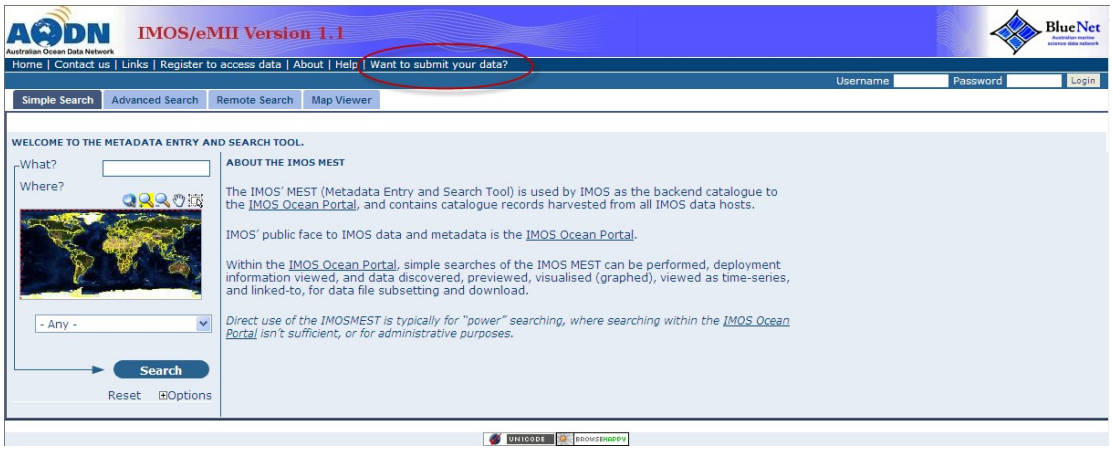
4. Select **Close** window for the **Delete Metadata Confirmation** screen to return to the MEST home page.

5.11. Simple Metadata Form

This section applies to **MEST version 1.2.1** and above.

If users do not wish to fill out a complete metadata form, a streamlined form is available to make it easier to submit data. As of MEST version 1.2.1, you do not need to register or log in prior to submitting data, as the process has been integrated.

1. From the top navigation menu, select **Want to submit your data**?


IMOS/eMII Version 1.1
Home | Contact us | Links | Register to access data | About | Help | Want to submit your data?
Username
Password
Login
Simple Search
Advanced Search
Remote Search
Map Viewer
WELCOME TO THE METADATA ENTRY AND SEARCH TOOL.
What?
Where?
- Any -
Search
Reset
Options
ABOUT THE IMOS MEST
The IMOS' MEST (Metadata Entry and Search Tool) is used by IMOS as the backend catalogue to the IMOS Ocean Portal, and contains catalogue records harvested from all IMOS data hosts.
IMOS' public face to IMOS data and metadata is the IMOS Ocean Portal.
Within the IMOS Ocean Portal, simple searches of the IMOS MEST can be performed, deployment information viewed, and data discovered, previewed, visualised (graphed), viewed as time-series, and linked-to, for data file subsetting and download.
Direct use of the IMOSMEST is typically for "power" searching, where searching within the IMOS Ocean Portal isn't sufficient, or for administrative purposes.

19. Select an option for **Are you already registered**?

    a. **No**

    → Go to **5.11 below**

    b. **Yes**

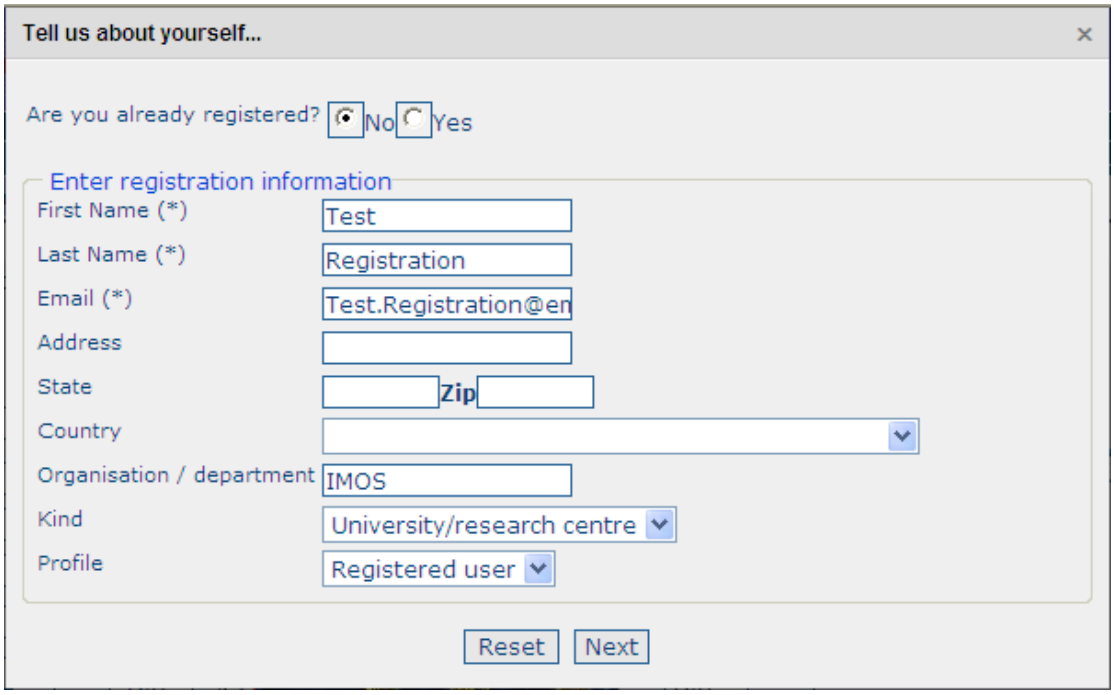
    → Go to **5.11 below**

20. A registration form will need to be submitted.

    c. Fill in the following fields for the **Enter registration information** area:

    - **First Name (*)**
    - **Last Name (*)**
    - **Email (*)**
    - **Address**
    - **State**
    - **Zip** (Postcode)
    - **Country**
    - **Organisation / department**
    - **Kind**
    - **Profile**

Note: Fields with asterisks (*) are compulsory.



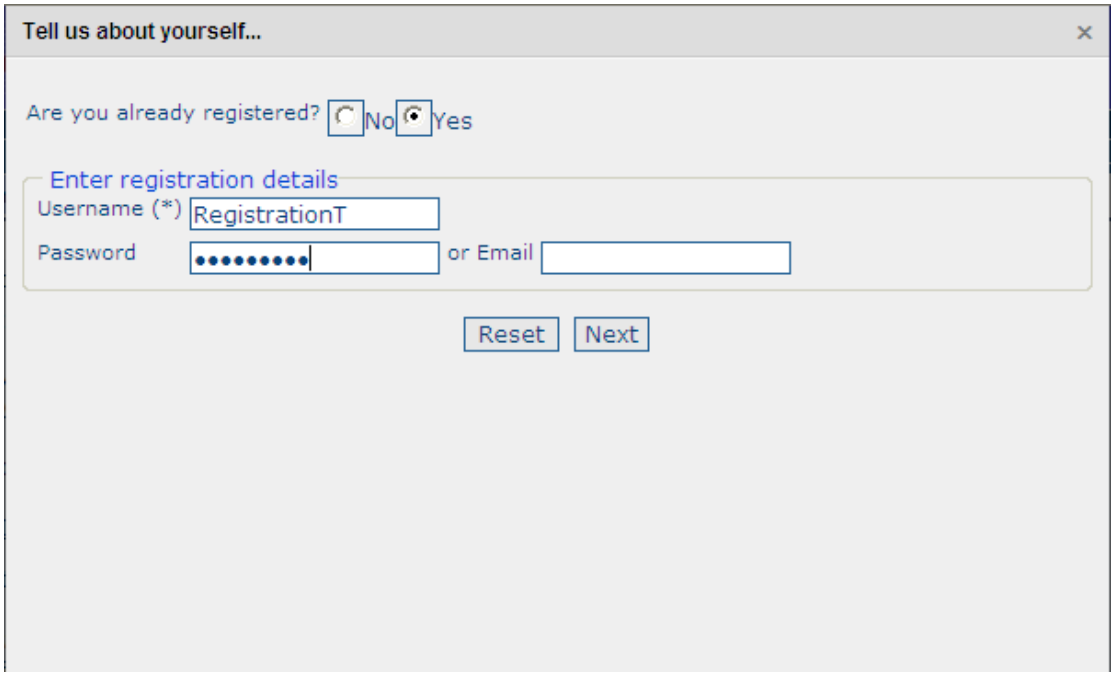
    d. Review the details entered, make any corrections needed, and then select the **Next** button.

If registration fails, follow the hints provided in the error message, review troubleshooting information in section **1.5.1 Registration** or, failing that, contact helpdesk (see section **1.1.3 Feedback**).

Go to **5.11 below**

21. A login form will need to be submitted.
    e. Fill in the following fields for the **Enter registration information** area:
        - **Enter registration details**
        - **Username (*)**
        - **Password**
        - **or Email**

Note: Username is compulsory and must be filled in. While **Password** and **Email** are both optional, it is still compulsory to fill in at least one of these fields.

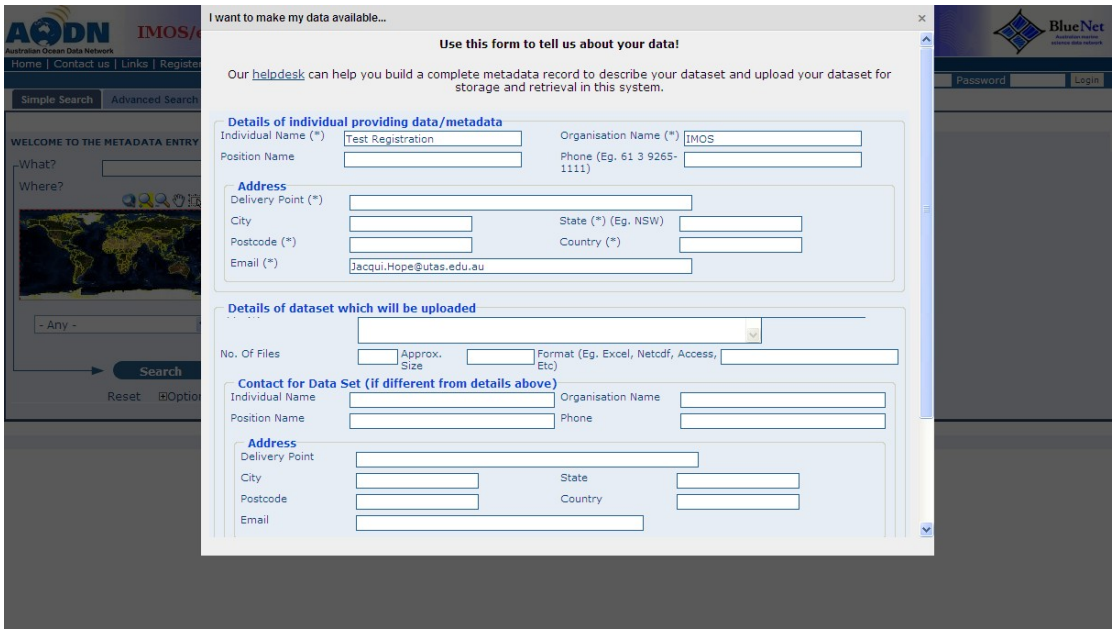


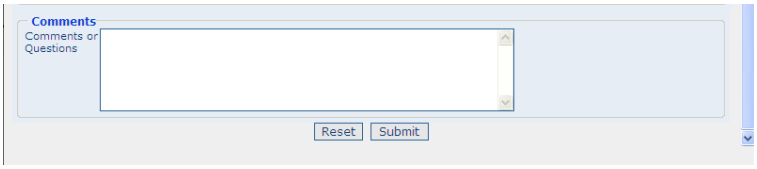
    f. Review the details entered, make any corrections needed, and then select the **Next** button.

If logging in fails, follow the hints provided in the error message, review troubleshooting information in **1.5.2 Logging In** or, failing that, contact helpdesk (see section **1.1.3 Feedback**).

Go to **5.11 below**

22. When the form is successfully submitted, fill out the relevant fields in the following screen:





Note: If fields are already filled, they may be skipped.

Note: Fields with asterisks (*) are compulsory.

- **Details of individual providing data/metadata**
  - **Individual name (*)**
  - **Organisation name (*)**

- **Position name**
- **Phone (eg. 61 3 9265-1111)**
- **Address**
  - **Delivery point (*)**
  - **City State (*) (eg. NSW)**
  - **Postcode (*)**
  - **Country (*)**
  - **Email (*)**

- **Details of dataset which will be uploaded**
  - **Title (*)**
  - **Abstract (*)**
  - **No. of Files**
  - **Approx. Size**
  - **Format (eg. Excel, netcdf, Access, etc)**
  - **Contact for Data Set (if different from details above)**
    - **Individual name**
    - **Organisation name**
    - **Position name Phone**
    - **Address**
      - **Delivery point**
      - **City State**
      - **Postcode**
      - **Country**
      - **Email**

- **Comments**
  - **Comments or Questions**

23. Review the details entered, make any corrections needed, and then select the **Submit** button.

If the form submission fails, follow the hints provided in the error message, or contact helpdesk (see section **1.1.3 Feedback**).

24. When the form is submitted successfully, the following message appears:

25. “It's not really that difficult is it? The Simple Metadata Information you supplied has been sent. Thanks. Our helpdesk will contact you to help you build a complete metadata record and upload your data shortly.”

Appendix 1: Contact details

There are a number of places within a metadata record that require you to enter contact details. It is designed this way to accommodate organisations that create data and have a number of different people administer it (e.g. principal investigator, point-of-contact, metadata point-of-contact). For the average user, the same person(s) and/or organisation(s) is likely to be in all of these sections. If this is the case we recommend supplying complete contact details in the Point of contact section (**POC**) and just fill out the basics in all other sections (see below). Note: a person(s) role will not change throughout the metadata record, so that if you are the principal investigator, you should be identified as such throughout the record.

Some organisations use “Position titles” rather than Individual names, and some prefer not to release some forms of contact detail to the general public (e.g. phone numbers). Before entering contact details, check with the organisation.

Group	**Field Title**	**Definition**	**Requirement**	**Individual Name**	**Organisation name**	**Position name**	**Phone**	**Address**	**Online Resource**	**Role**
Metadata	Contact	Identification of, and means of communication with, person(s) and/or organisation(s) associated with the metadata record. List current contact information	Only list full contact details if different from the **Point of Contact** section (**POC**), or person(s) and/or organisation(s) differ from those listed in POC	Y if applicable	Y if applicable	Y if applicable	N	Email only	N	Y
Identification	Cited Responsible Party	Identification of, and means of communication with, person (s)	Only list full contact details if different from POC, or	Y if applicable	Y if applicable	Y if applicable	N	Email only	N	Y

Group	Field Title	Definition	Requirement	Individual Name	Organisation name	Position name	Phone	Address	Online Resource	Role
		and/or organisation(s) associated with the resource. List contact information for person(s) and/or organisation(s) where the resource was produced.	person(s) and/or organisation(s) differ from those listed in POC							
Identification	Point of Contact (POC)	Identification of, and means of communication with, person(s) and/or organisation(s) associated with the resource. List current contact information	Always list full details	Y if applicable	Y if applicable	Y if applicable	Y	Y	Y	Y
Identification	Resource maintenance - Contact	Party responsible for resource maintenance. List current contact information	Only list full contact details if different from POC, or person(s) and/or organisation(s) differ from those listed in POC	Y if applicable	Y if applicable	Y if applicable	N	Email only	N	Y

Group	Field Title	Definition	Requirement	Individual Name	Organisation name	Position name	Phone	Address	Online Resource	Role
Identification	Descriptive Keywords	When using GCMD, CAAB codes or Marine Community Profile geographic extent names, the organisation that owns the reference must be cited.	Only have when using a formalised thesaurus or geographic reference.	N	Y	N	N	N	Y	Y
Identification	Resource specific usage	Identification of, and means of communicating with, person(s) and organisation(s) using the resource(s)	Only list full contact details if different from POC, or person(s) and/or organisation(s) differ from those listed in POC	Y if applicable	Y if applicable	Y if applicable	Y	Y	Y	Y
Identification	Geographic element – Geographic description - Cited Responsible Party	When using a geographic reference (e.g. c-squares, Marine Community Profile geographic extent names), the organisation that owns the reference must be cited.	Only have when using a geographic reference. Only cite relevant area	N	Y	N	N	N	Y	Y
Identification	Aggregation Info – Cited	Contact details for the person(s)	Only list full contact details	Y if applicable	Y if applicable	Y if applicabl	N	Email only	N	Y

Group	Field Title	Definition	Requirement	Individual Name	Organisation name	Position name	Phone	Address	Online Resource	Role
	Responsible Party	who created the aggregation. List current contact information	if different from POC, or person(s) and/or organisation(s) differ from those listed in POC			e				
Distribution	Distributor -Distributor contact	Party responsible for distributing the resource. List current contact information	Only list full contact details if different from POC, or person(s) and/or organisation(s) differ from those listed in POC	Y if applicable	Y if applicable	Y if applicable	N	Email only	N	Y

Appendix 2: Country ID Reference List

ID	Country
2	Afghanistan
338	Africa
3	Albania
4	Algeria
1220	All fishing areas
5	American Samoa
6	Andorra
7	Angola
258	Anguilla
30	Antarctica
8	Antigua and Barbuda
1008	Arctic Sea
9	Argentina
1	Armenia
22	Aruba
337	Asia
1016	Atlantic, Antarctic
1012	Atlantic, Eastern Central
1010	Atlantic, Northeast
1009	Atlantic, Northwest
1015	Atlantic, Southeast
1014	Atlantic, Southwest
1011	Atlantic, Western Central
10	Australia
11	Austria
52	Azerbaijan, Republic of
12	Bahamas
13	Bahrain
16	Bangladesh
14	Barbados
57	Belarus
255	Belgium
23	Belize
53	Benin
17	Bermuda
18	Bhutan
19	Bolivia
80	Bosnia and Herzegovina
20	Botswana
31	Bouvet Island
21	Brazil
24	British Indian Ocean Ter
239	British Virgin Island
26	Brunei Darussalam
27	Bulgaria
233	Burkina Faso
29	Burundi
115	Cambodia
32	Cameroon
33	Canada
35	Cape Verde
317	Caribbean
36	Cayman Island
312	Central Africa
37	Central African Republic
316	Central America
39	Chad
40	Chile
41	China, Mainland
214	China, Taiwan Prov of
42	Christmas Island
43	Cocos Islands
44	Colombia
45	Comoros
250	Congo, Dem Republic of
46	Congo, Republic of
47	Cook Islands
48	Costa Rica
98	Croatia
49	Cuba
50	Cyprus
167	Czech Republic
54	Denmark
72	Djibouti
55	Dominica
56	Dominican Republic
324	East & South East Asia
176	East Timor
313	Eastern Africa

Group	Field Title	Definition	Requirement	Individual Name	Organisation name	Position name	Phone	Address	Online Resource	Role

334	Eastern Europe
58	Ecuador
59	Egypt
60	El Salvador
61	Equatorial Guinea
178	Eritrea
63	Estonia
238	Ethiopia
335	Europe
427	Europe, Non-EU Countries
64	Faeroe Islands
65	Falkland Islands
322	Far East
66	Fiji Islands
67	Finland
68	France
69	French Guiana
70	French Polynesia
71	French South Terr
74	Gabon
75	Gambia
76	Gaza Strip
73	Georgia
79	Germany
81	Ghana
82	Gibraltar
84	Greece
85	Greenland
86	Grenada
87	Guadeloupe
88	Guam

89	Guatemala
90	Guinea
175	Guinea-Bissau
91	Guyana
93	Haiti
92	Heard and McDonald Is
95	Honduras
97	Hungary
99	Iceland
100	India
1019	Indian Ocean, Antarctic
1018	Indian Ocean, Eastern
1017	Indian Ocean, Western
101	Indonesia
307	Intergvt Author Devpment
102	Iran, Islamic Rep of
103	Iraq
104	Ireland
264	Isle of Man
105	Israel
106	Italy
107	Ivory Coast
109	Jamaica
110	Japan
112	Jordan
108	Kazakhstan
114	Kenya
83	Kiribati
116	Korea, Dem People's Rep
117	Korea, Republic of
118	Kuwait

113	Kyrgyzstan
120	Laos
315	Latin Amer & Caribbean
348	Latin America
119	Latvia
121	Lebanon
122	Lesotho
123	Liberia
124	Libyan Arab Jamahiriya
125	Liechtensten
126	Lithuania
256	Luxembourg
154	Macedonia
129	Madagascar
130	Malawi
131	Malaysia
132	Maldives
133	Mali
134	Malta
127	Marshall Island
135	Martinique
136	Mauritania
137	Mauritius
270	Mayotte
1013	Mediterran and Black Sea
138	Mexico
145	Micronesia,Fed States of
139	Midway Islands
146	Moldova, Republic of
140	Monaco
141	Mongolia

Group	Field Title	Definition	Requirement	Individual Name	Organisation name	Position name	Phone	Address	Online Resource	Role

142	Montserrat
143	Morocco
144	Mozambique
28	Myanmar
147	Namibia
148	Nauru
319	Near East
325	Near East and North Africa
320	Near East in Africa
321	Near East in Asia
149	Nepal
151	Neth Antilles
150	Netherlands
156	New Zealand
153	NewCaledonia
157	Nicaragua
158	Niger
159	Nigeria
160	Niue
161	Norfolk Island
421	North Africa
428	North America
310	North Western Africa
163	Northern Mariana Is
162	Norway
221	Oman
1026	Pacific, Antarctic
1023	Pacific, Eastern Central
1021	Pacific, Northeast
1020	Pacific, Northwest
1025	Pacific, Southeast

1024	Pacific, Southwest
1022	Pacific, Western Central
165	Pakistan
166	Panama
168	Papua New Guinea
169	Paraguay
170	Peru
171	Philippines
172	Pitcairn Islands
173	Poland
174	Portugal
177	Puerto Rico
179	Qatar
182	Reunion
183	Romania
185	Russian Federation
184	Rwanda
187	Saint Helena
188	Saint Kitts and Nevis
189	Saint Lucia
190	Saint Pierre & Miquelon
191	Saint Vincent/Grenadines
244	Samoa
192	San Marino
193	Sao Tome and Principe
194	Saudi Arabia
195	Senegal
196	Seychelles
197	Sierra Leone
200	Singapore
199	Slovakia

198	Slovenia
25	Solomon Islands
201	Somalia
202	South Africa
318	South America
323	South Asia
390	South of Sahara
271	SouthGeorgia/Sandwich Is
314	Southern Africa
203	Spain
38	Sri Lanka
206	Sudan
207	Suriname
260	Svalbard Is
209	Swaziland
210	Sweden
211	Switzerland
212	Syrian Arab Republic
208	Tajikistan
215	Tanzania, United Rep of
216	Thailand
217	Togo
218	Tokelau
219	Tonga
220	Trinidad and Tobago
222	Tunisia
223	Turkey
213	Turkmenistan
224	Turks and Caicos Is
227	Tuvalu
232	US Minor Outlying Is

Group	Field Title	Definition	Requirement	Individual Name	Organisation name	Position name	Phone	Address	Online Resource	Role

240	US Virgin Islands
469	USSR, Former Area of
226	Uganda
230	Ukraine
225	United Arab Emirates
229	United Kingdom
231	United States of America
234	Uruguay
235	Uzbekistan
155	Vanuatu
236	Venezuela
237	Viet Nam
242	Wake Island
243	Wallis and Futuna Is
245	West Bank
311	Western Africa
303	Western Europe
205	Western Sahara
9999	World
249	Yemen
251	Zambia
181	Zimbabwe